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CONTENTS: 350267

		PAGE
1.	Progress of Education in Madras State	2
2.	Teynampet Poultry Research Station	6
3.	One More Bridge Across Cauvery	11
4.	The Cooking of freshly harvested Raw Rice—Dr. Sreenivasan and Dr. Desikachari.	13
5.	Labour Welfare during the last five years	15
6.	Industries Development under the Second Plan—Sri T. K. Palaniappan, I.A.S.	20
7.	Harijan Welfare under the Second Plan—Sri A. Somasundaram	23
8.	Tourist Coach for Madras State	29
9.	Need for Blood Banks—Sri T. Purushotham, M.L.A.	31
10.	Metric System in Industry	32
11.	Careers in the Armed Forces—Sri D. D. Anugraham	33

Front Cover: Sri K. Kamaraj, Chief Minister, received Prime Minister Nehru when he arrived at the air-port on January 31. Srimathi John, wife of the Governor, and Mrs. Mountbatten are also seen in the picture.

6362 Schools In Five Years : Phenomenal Rise in Educational Facilities

The Constitutional directive is that free and compulsory education should be given to all children between the ages of 6 and 14. At the beginning of the First Five-Year Plan period, it was found that not only 55 per cent of the children of this age group were not at school but a number of localities had no school in reasonable proximity. As many as 4,600 centres with a population of over 500 were not served by an elementary school within a distance ɔne mile. Naturally the provision ls in such school-less centres ıighest priority. The financial ı by the Government of India Scheme for the Relief of the ɹed Unemployed was fully availed and as many as 4,267 schools were ɲed in the last two years of the Plan riod. This scheme served two purposes. One was the opening of schools in school-less centres to provide educational facilities for the children in those centres and the opening of additional classes in the then existing schools to provide for a larger number of school-age children. The other purpose was the provision of employment for 6,076 unemployed youths, a feature which greatly contributed towards contentment among the educated unemployed in society. The steps taken by the State Government to give relief to the educated unemployed could be better appreciated if the total number of teachers additionally employed during the Plan period is known. The fact that about 32,000 teachers were additionally employed in all types of schools during the Plan period will show that the achievement in this direction was not inconsiderable.

The number of elementary schools, including basic schools, increased from 20,982 to 27,127 (29·3 per cent increase) and the strength of these schools increased from 2,547,800 to 3,392,600 (33 per cent increase).

To achieve the objective of free education, education was promulgated to be free for all poor children up to Standard VIII in Elementary Schools and Form III in Secondary Schools. It was also decided that children of elementary school teachers, last grade Government servants, Constables and Head Constables should be given free education up to VI Form from 1956-57. It will be seen that these measures go to provide equal opportunities for all the children to get education up to the age of 17.

Secondary Education

This period also witnessed a great expansion in the field of Secondary education both quantitatively and qualitatively. During the year 1950–51, the number of Secondary schools for boys and girls was 803. The number at the end of the Plan period was 1,020 (27 per cent). In the wake of increase in the number of institutions, there was also an increase in strength in those institutions. 409,936 was the strength immediately before the Plan period and it had increased to 535,877 at the end of the period (30 per cent increase). The noteworthy feature in this expansion is that a good number of schools, viz. (140) were started in rural parts and they have now thus brought the advantage of Secondary education to the children in these parts.

But mere academic instruction alone will not satisfy the growing demand for man-power in the country for the vast and many-sided expansion that is taking place. Secondary education has to be made purposeful and should provide for varied talents and aptitudes. With these ends in view secondary schools should be transformed into multi-purpose schools. In 1950–51, 83 schools had bifurcated courses of studies. During the Plan period, bifurcated courses were newly introduced in certain schools and additional courses were introduced in a few schools, which had already bifurcated courses, thus bringing the total number of secondary schools having bifurcated courses to 138 at the end of the Plan period. During 1955-56 with the generous financial assistance offered by the Government of India, 450 schemes for improvement of secondary schools were sanctioned as indicated below :—

(1) 100 courses were opened in 65 schools so that they could develop into multi-purpose schools ;

(2) Improvement of existing facilities for teaching of science in 20 schools ;

(3) Improvement of teaching Core subjects in 100 schools ;

(4) Improvement of school libraries in 30 multi-purpose and 100 other schools ; and

(5) Introduction of craft in 100 middle schools.

The estimated total cost of the schemes of improvement in the secondary schools is as follows :—

	Non-recurring. RS.	*Recu rin* RS
Introduction of bifurcated courses.	24,82,800	3,74,500
Improvement of teaching Science.	10,00,000	..
Improvement of teaching Core subjects.	15,00,000	..
Improvement of libraries.	4,00,000	..
Introduction of Crafts.	1,87,500	..
	55,70,300	3,74,500

The State was not unaware of its own responsibility for giving financial assistance to educational institutions towards the provision of adequate and suitable accommodation and equipment for the increased enrolment. A sum of about Rs. 120 lakhs was given as grant in this direction from State funds during the Plan period.

Hundred per cent Increase Of Teaching Grant To Colleges

Training Institutions.—With the increase in the number of primary and secondary schools the necessity for opening more training colleges and training schools, ordinary as well as the basic type was keenly felt. There were 112 training schools at the beginning of the Plan period. The number of trainees in those schools in 1950–51 was 13,531. At the end of the period, the number of training schools rose to 165, and the number of trainees in those schools was 18,496. The number of teachers who successfully completed the training course was 7,700 at the beginning of the Plan period while it increased to 8,750 at the end of this period. The total number of teachers trained during the Plan period was about 41,000. The number of training colleges for teachers at the beginning of the Plan period was 10 (7 for men and 3 for women). Five training colleges all for men were newly opened during the period, thus making the total number of training college in the State 15.

Retraining in Basic Education.—Basic Education being the accepted policy of Government in the primary stage, steps were taken during the Plan period for the expansion of Basic Education. To this end, facilities for teacher-training in Basic Education were provided—

(i) for graduate teachers, and

(ii) for non-graduate teachers.

Retraining of graduate teachers was held in one or more of the centres, i.e., Perianaickenpalayam, Kallupatti, Batlagundu during the Plan period. The duration of the course was five months. The number of graduate teachers retrained was 260. Elementary and Secondary grade teachers were also given similar retraining in Basic Training for three months.

The number of Elementary and Secondary grade teachers retrained during the period was 8,910.

For the first time since the introduction of Basic Education in the State, conferences of those engaged in Basic Education, i.e., Teachers, Headmasters, Headmistresses and Inspecting Officers were held in November and December 1951. From 1952–53 onwards Regional Conferences were held annually one in Madurai Division and the other in Coimbatore Division. These Regional Conferences were organized by Basic Education Officers, District Educational Officers, Basic Trained Deputy Inspectors, Headmasters and Assistants of Basic Training Schools and Headmasters of Post-Basic Schools and of select Basic Schools attended them. These Conferences provided opportunities to the members of the staff of Basic Training Schools and the Inspecting and Administrative Officers dealing with Basic Education to come into personal contact, review the work, discuss problems and formulate plans for development.

Besides these Regional Conferences there were in-service education of Basic teachers. Once a month all the Basic teachers in a compact area met in the Basic Training schools in that area ; once in a quarter they had a full day conference, the plan of work for the day being made earlier in consultation with the Inspecting Officer. At the conference the teachers discussed their day-to-day problems in the school and the decisions arrived at after the discussions were accepted by them to be put through in schools. The Inspecting Officers also personally helped the teachers in putting into effect those decisions arrived at, in the schools.

Collegiate Education

During the Plan period, the number of colleges for general education increased from 45 (35 for men and 10 for women) to 63 (45 for men and 18 for women) an increase of 40 per cent. The scholars in these colleges increased from 29,000 (25,350 men and 3,650 women) to 43,800 (37,200 men and 6,600 women), nearly 51 per cent increase during the Plan period. According to the present system of Collegiate education only the responsibility for affiliating the colleges rests with the University. But the financial burden of running these institutions devolves on Government and the Managements concerned. At the beginning of the Plan period, a sum of Rs. 7,42,300 was paid in 1950–51 in the shape of Teaching grant to Arts Colleges, while this figure rose up to Rs. 16,06,500 in 1955–56, viz., at the end of the period an increase of 116 per cent

On the side of Development of Technological institutions, two Engineering Colleges under private managements were opened during the Plan period and they had been paid a teaching grant of Rs. 1,22,800 and non-recurring grant of Rs. 4,52,000 in 1955–56. Since the opening of the two aided Engineering Colleges, the State Government had met a substantial portion of the cost of development of the two colleges. The total non-recurring grant paid to these colleges during the first Plan period up to 31st March 1955 was Rs. 10·74 lakhs.

Teacher Benefit.—The amelioration of the condition of the teachers had also received attention. The Provident Fund - *cum* - Insurance - *cum* - Pension Scheme was introduced with effect from 1st April 1955.

The scheme is to benefit all teachers in Elementary Schools under Local Board and aided managements and the secondary and other similar grades of teachers in Secondary schools, both under Local Board and aided managements. It is estimated that about 90,000 teachers will be benefited by this scheme. It may be mentioned in passing that no other State in India has conferred this triple benefit on teachers serving in aided and local body schools. The teachers under-

Board Service also get the same kind of free medical service available to their compeers in Government service.

N.C.C. and A.C.C. Schemes

At the beginning of the Plan period there were 99 troops in 60 Secondary Schools for boys (Army Wing 87, Air Wing 6, Naval Wing 6), but at the end of the period the corresponding figures were 200 troops in 157 schools (Army Wing 182, Naval Wing 9, Air Wing 9).

There was not even a single troop of N.C.C. in Girls' Schools at the beginning of the Plan period; but the figure at the end of the Plan period was 21 troops in 19 schools.

Though there was no A.C.C. Group in any school at the beginning of the Plan period, at the end of it there were 671 groups—54 for girls and 617 for boys.

N.C.C. troops were functioning in 13 colleges at the beginning of the Plan period, but at the end of it the figure had risen up to 31. At the end of the Plan period three colleges for women participated in the scheme, though there were none at the beginning of the period.

Library Movement

Madras was the first State in India to have a Public Libraries Act. The provisions of the Act came into force from 1st April 1950. The first batch of Local Library Authorities was constituted for three years in 1950–51. As they were new to the movement and the movement itself was in its initial stages no appreciable progress could be achieved by the beginning of the First Five-Year Plan period. Schemes for the spread of library service in the districts spread over a period of 2 to 5 years were approved in respect of all the districts except Madras. Government permitted the Local Library Authority, Madras, to take over the 73 Corporation Reading Rooms-*cum*-Libraries for the opening of Branch Libraries in the several wards in Madras City. Accordingly the Local Library Authority, Madras, took them over under their control on 1st June 1955. There were no District Central Libraries and Branch Libraries at the beginning of the Plan period. But by the end of the period the target of 14 District Central Libraries and 241 Branch Libraries was achieved. The number of delivery stations was 342 at the end of the Plan period as against none at the beginning of the period.

In 1953–54 the number of books stocked in the libraries totalled about 794,000 while at the end of the Plan period it rose up to 956,000.

The Connemara Public Library had become under the Act the State Central Library and it had a stock of 74,141 books at the beginning of t[illegible] Plan period and 86,176 at the end of [illegible]. The number of books issued rose from 55,500 to 67,800 during the Plan period.

The number of schools whose libraries were thrown open to the public rose from 760 to 997. The number of

Sixty-five per cent of Children are now in Schools

Sixty-five per cent of the children between the ages of six and fourteen have been enrolled in the schools of Madras State by the end of the First Five-Year Plan, stated Sri C. Subramaniam, Minister for Education and Finance, addressing a Press Conference at the Secretariat in the second week of January.

The Minister said that facilities for all children to attend school especially in the rural areas have already been provided but that did not mean that automatically every child attended the school because, there were other factors such as economic consideration in the way of those children attending school. Some of those children had to earn something to keep the family going.

The Minister reminded that only 45 per cent of the children of this age-group were in school at the beginning of the Plan period.

The Education Minister pointed out that in Madras as compared to the whole of India, the proportion of untrained teachers was extremely small being less than four per cent of the total. Besides, in elementary schools 40 per cent of the teachers were women.

He said that he did not believe in State-management of all elementary schools. Once the Government took them over, the initiative and local co-operation were not available. Therefore the Government was considering whether the privately managed elementary schools could be helped by a committee constituted for the purpose or by the local panchayats.

As regards religious instruction in schools, the Minister stated that guidance in moral principles and general conduct could be given to the students but once they brought in the teaching of religions, he was afraid the position would become very bad.

Elementary education would be on the basis of "Five-hour School Day" and that did not mean that the children would be always within the school premises for the full day, the Minister stated.

Of the 18 new colleges started during the Plan period, 8 were for women.

The Minister felt that the creation of N.C.C. and A.C.C. had contributed to the general high level of dis[illegible] men [illegible]ne in the colleges. The target set for Madras in the First Plan was r[illegible] and the target for the Second Plan has been completely accep[illegible] [illegible]nging [illegible]ds provided for.

schools 138 at

books made use of by the public from such libraries rose from 13,037 to 32,519.

Social Education

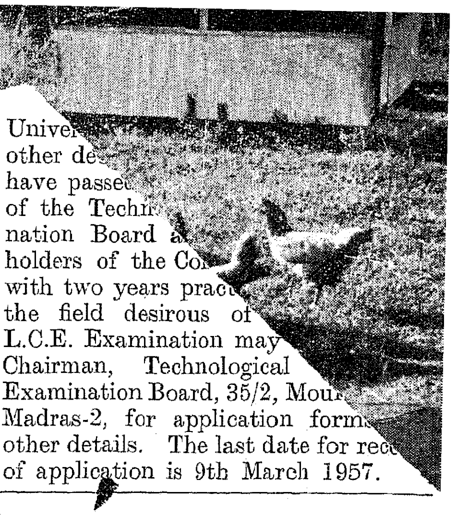
Adult Education.—At the beginning of the Plan period there were 1,980 adult literacy schools with a strength of 52,816. These schools were permitted to be opened wherever there was an application for such schools. But such random distribution of schools did not secure the desired effect. The Government therefore wanted to confine the running of these institutions in areas where there was intensive social activity. In pursuance of this policy they ordered in 1954–55 that the opening of adult schools should be confined only to National Extension Service Blocks and Community Project areas, where constant supervision and guidance from social workers would be possible in running these institutions. Even the age-limit was reduced from 18 to 40 to 8 to 18 as this age range would be better suited for the reception and absorption of new ideas. This has affected both the number of adult literacy schools and the number of scholars in them. At the end of the Plan period there were ..529 adult literacy institutions with 45,127 scholars.

Training of teachers for Social Education.—Training courses, each of 45 days' duration, were conducted during the period, the number thus trained being 793.

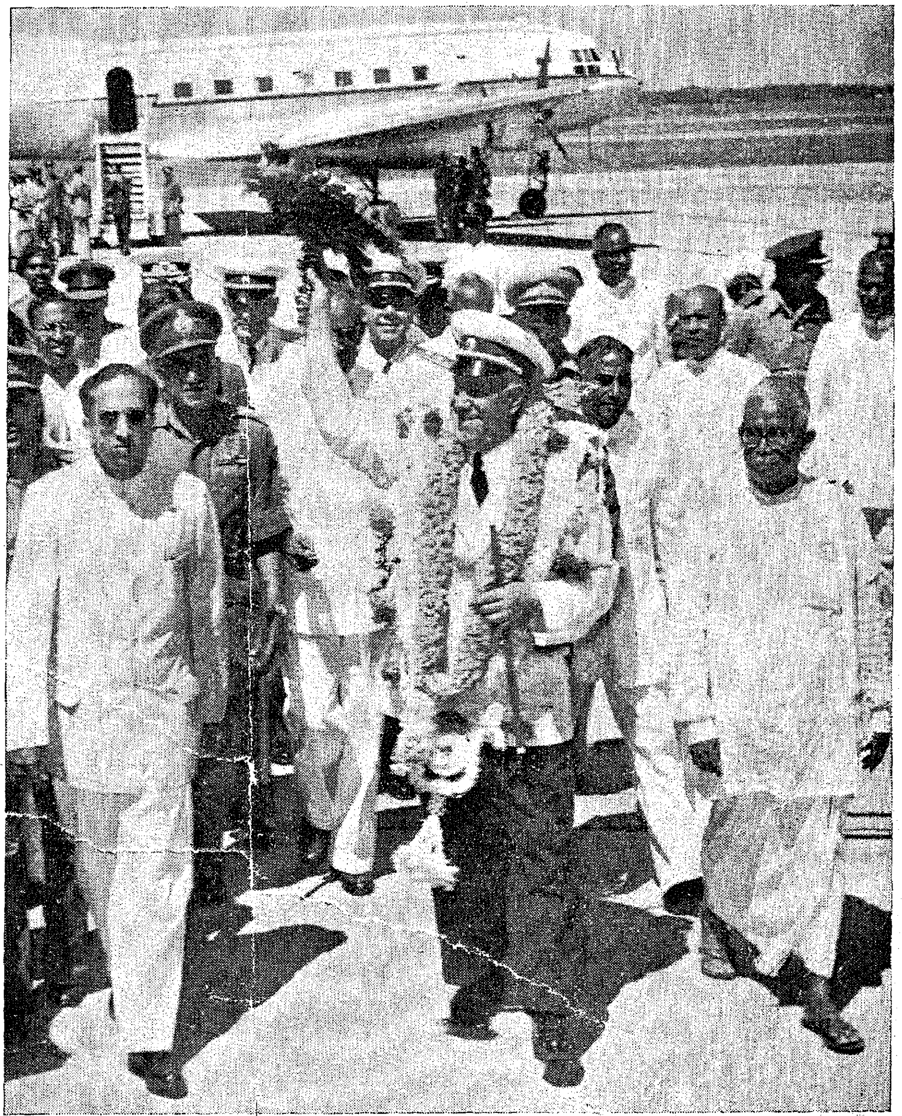
Literary Workshop.—The Literary Workshop to train authors in the technique of writing literature for neo-literate adults was conducted at Peelamedu for six weeks in the closing year of the First Five-Year Plan. Twenty writers were trained in the Literary Workshop. A large number of folders, books and booklets were written in the Literary Workshop and finalised after repeated tests on neo-literate adults. Of these, as a first instalment, 41 are under print and will be released shortly.

... books for basic schools.— ... were not suitable reading books ... basic schools it was decided ...ch books should be prepared, pr... B ... and supplied free of cost to basic schools. Accordingly 50 books were prepared during the Plan period. They are under print and will be released for supply as and when they are ready.

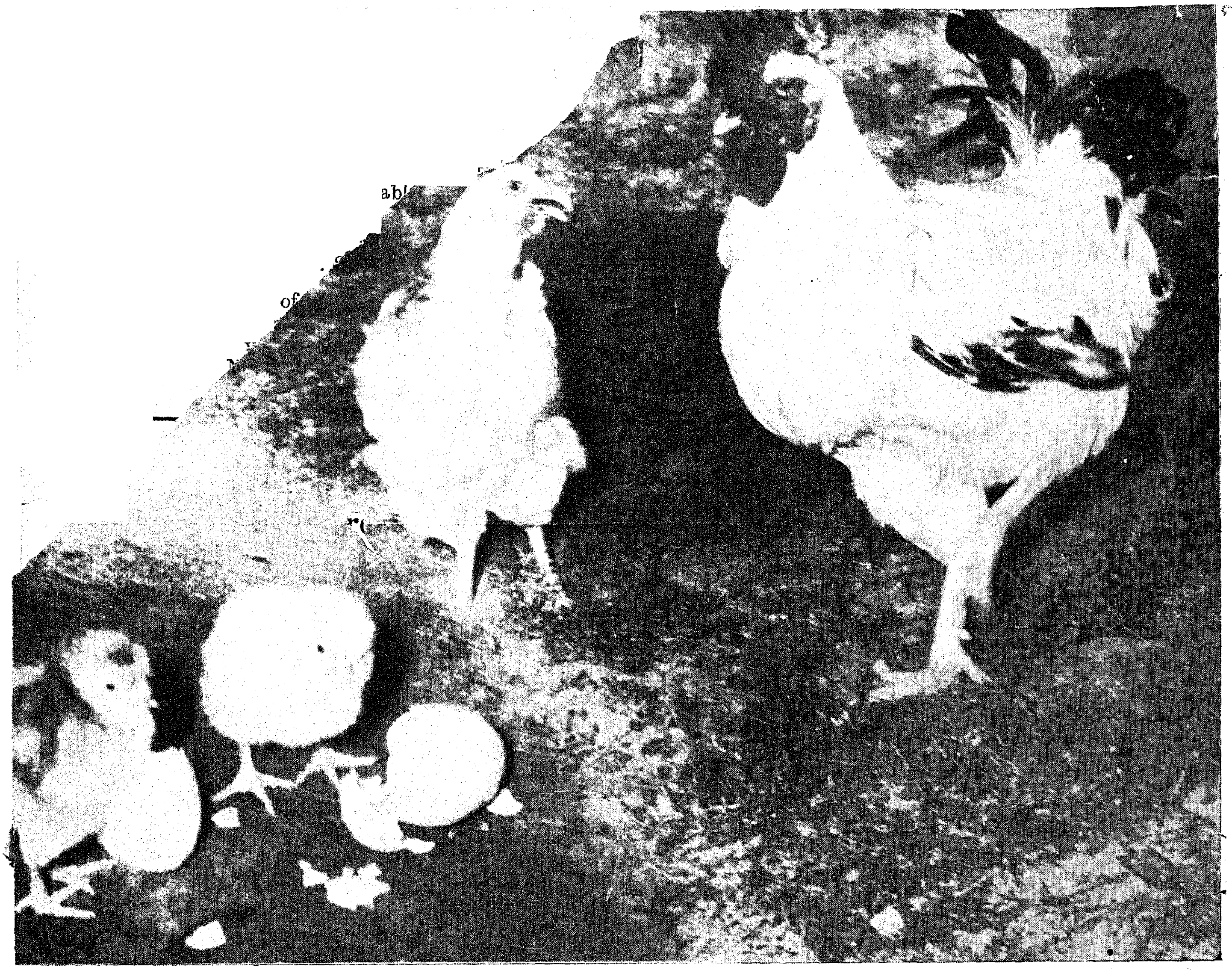
Industrial Technologi...



The Technological Diploma Examination Board, Madras, will as usual hold the diploma examinations in all the subjects under its purview from 22nd April 1957 onwards at Madras, Madurai, Coimbatore, Tiruchirappalli, Mangalore and Kozhikode. Candidates may obtain application form and other details from the Principals of the Institutes where they studied on or after 9th February 1957. Roads and Irrigation Diploma holders desirous of appearing for the L.C.E. Examination may write to the Registrar, Annamalai Univer... other de... have passe... of the Techn... nation Board a... holders of the Co... with two years prac... the field desirous of ... L.C.E. Examination may ... Chairman, Technological ... Examination Board, 35/2, Mou... Madras-2, for application form... other details. The last date for rec... of application is 9th March 1957.



Marshal Zhukov, Defence Minister of the U.S.S.R., who was on a tour of India arrived in Madras by a special Ilyushin plane on February 5. He was received by Sri M. Bhaktava...m, Minister for Agriculture, and by a large number of dignitaries.



A pair of Light Sussex with a day-old incubator hatched chicks. This is one of the exotic breeds used as foundation stock in the Research Station.

Teynampet Poultry Research Station

Efforts to Improve the Local Breeds

"An egg a day will keep the drug away" is only a slight variant of an old saying. But nobody will deny that it is as good as its original in point of wisdom; more so in its application to a country like ours where cereal-rich diet is the order of the day The intake of eggs will avert many diseases caused by malnutrition.

In our country, the per capita consumption of eggs per annum is only eight. This is because poultry and poultry products are costly and rare. Realising this the Governments both at the Centre and the States have launched a number of schemes with a view to bring this rich form of diet within the easy reach of all. The aim of the Government is to increase the per capita intake to an egg every day.

Poultry Research stations have been set up in various parts of the country to improve the local stock by pedigreed strains of exotic breeds such as White Leghorn, Rhode Island Red, Light Sussex and Black Minorca. These imported birds are acclimatised, bred and multiplied in the Research stations. Improving egg production, egg size and control of common forms of poultry diseases form part of the work.

One such Poultry Research Station is located in a 10-acre farm at Teynampet, Madras. This farm was formerly the Military Grass Farm.

The Teynampet Poultry Research Station was opened in the year 1941 and is the second of its kind in Madras State the other being at the Livestock Research Station, Hosur. It was started with a foundation stock of 90 birds consisting of local indigenous breeds such as Visakhapatnam and Kalahasthi.

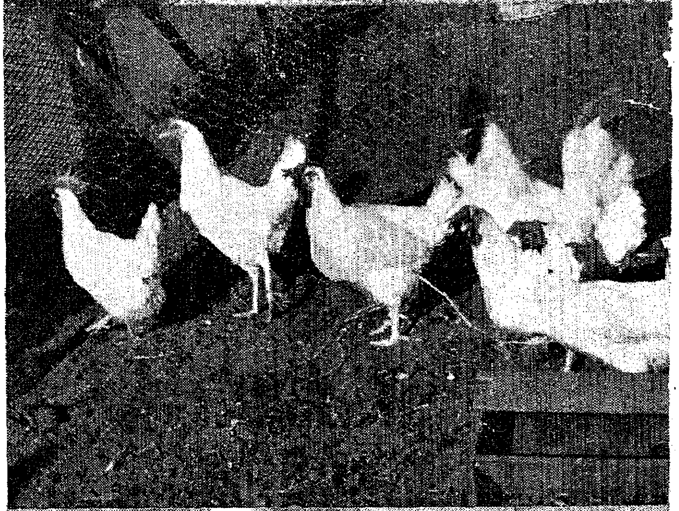
Exotic birds in White Leghorn, Rhode Island Red, Light Sussex and

The Indian Fowls:

The country hen is relatively a very small bird weighing three pounds. The egg laying capacity of this bird is only 50 small sized eggs annually weighing 75 ounces, but consume as much food as the exotic breeds with better produc'ive capacity. If the country breeds are improved by exotic birds, the annual egg production can be increased to 150 after a few generations. The size of the egg also can be considerably increased.

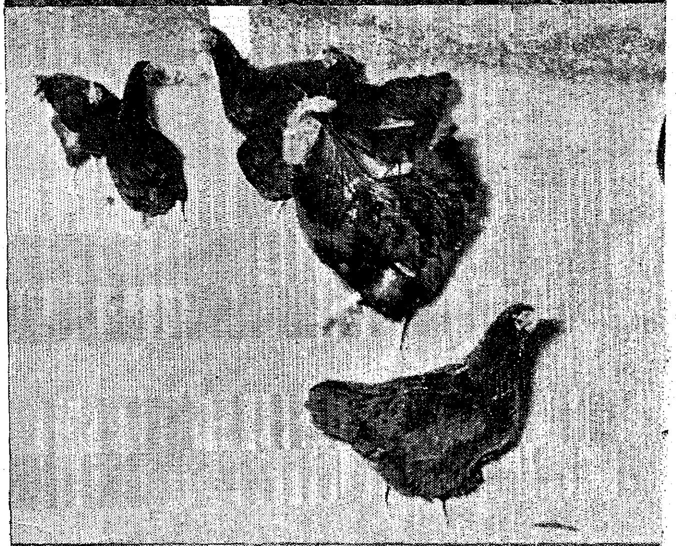
White Leghorns:

This foreign bird is the most productive of all. A hen of this breed lays 200 eggs annually weighing two ounces each. The body weight of a hen is four to six pounds and so advantageous in the point of meat value.



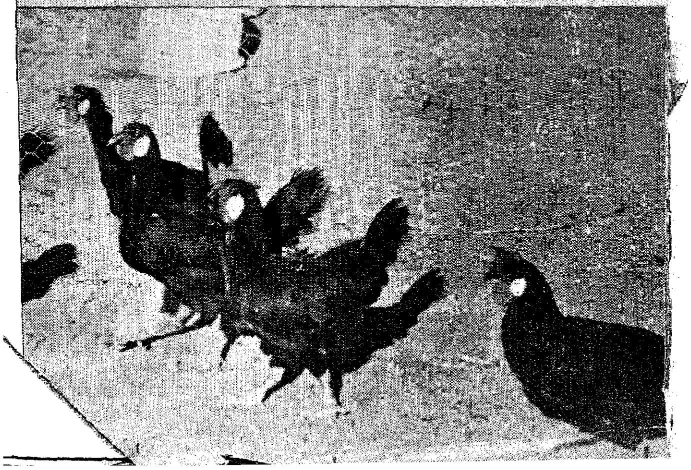
Rhode Island Reds:

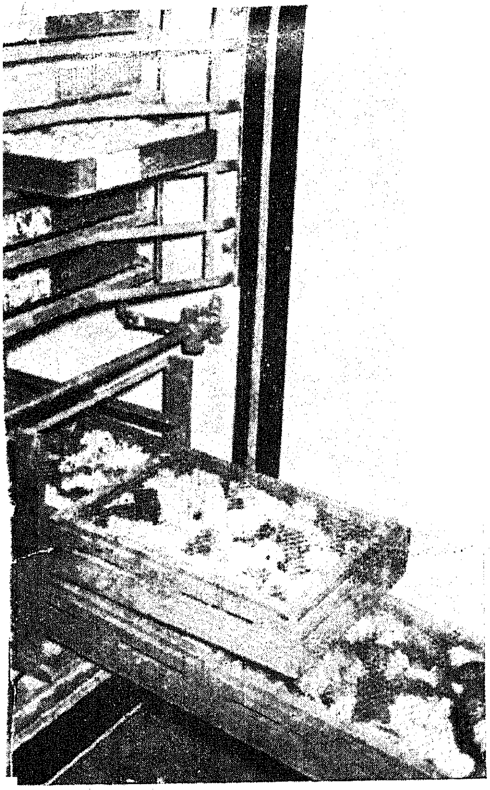
Next to white leghorn comes this variety in the productive capacity. The annual production is 175 eggs of two ounces weight which is the standard egg weight. The body weight of the fowl of this breed is four to six pounds.



Black Minorcas:

A hen of this variety lays 160 eggs of standard size annually.





A mammoth incubator used in the Research Station. This electrically operated device can hatch 1,408 eggs at a time.

Black Minorca were later introduced from the Poultry Farm, Hosur.

The object of this research station is not only to meet the demands for hatching eggs and breeding fowls of exotic breeds but to serve as a demon tration centre for poultry production on modern scientific lines. During the last twelve years, 21,298 chickens and 165,422 eggs were produced and 36,975 hatching eggs and 9,522 chickens were distributed for poultry development in the State. There are 356 laying hens and 6,334 other stock of birds consisting of White Leghorn, Rhode Island Red, Light Sussex, Brown Leghorn, Australorps, Black minorca and indigenous breed. The activities of the Farm have been very much increased during the past two years consequent on the poultry development and improvement undertaken under the Second Five-Year Plan. In addition to the chicks produced at this Station, the Government have already sanctioned Rs. 10,300 for importing 5,000 day-old chicks from the United Kingdom for distribution in the N.E.S. and C.P. areas, of which over 2,000 day-old chicks have already arrived. Under the T.C.M. aid, a shipment of 30,000 White Leghorn and Rhode Island Red pedigree baby chicks has been arranged for India. Madras State is allotted 1,000 chicks from this consignment to form a foundation stock of high yielding strain.

Equipment

Incubators. A mammoth electrically operated 1,408 capacity incubator is now in operation for the mass scale production of chicks in addition to a dozen small unit incubators of 50 to 200 egg capacity worked by kerosene oil.

Brooders. A masonry brooder house with a set of three rooms holding 1,000 baby chicks has been constructed. A dozen portable brooders with electric hovers and runs holding 100 baby chicks each have also been provided. As more brooding space is required, orders for electric battery brooders have been placed and will be installed soon. Brooders heated by kerosene oil for use in places where electricity is not available have also been introduced for demonstration purposes.

Housing. Different types of poultry houses have been constructed to hold adult birds ranging from a dozen to 50 in each house.

Poultry pens. Properly designed and spacious poultry pens have been constructed for rearing and accommodating laying and breeding stock.

Different plots of land are under cultivation of greens for poultry of which lucerne, sunnhemp and ceylon spinach are cultivated.

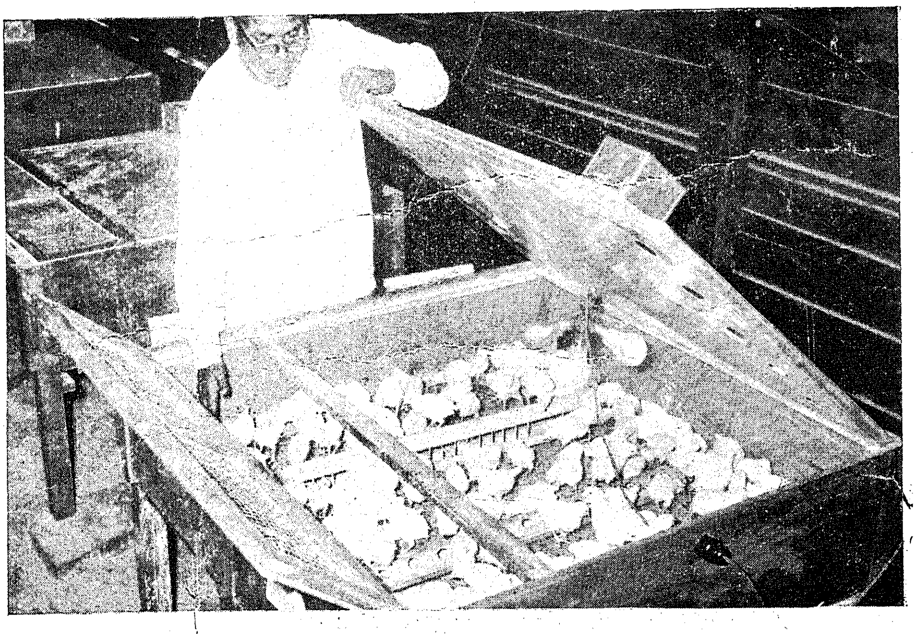
Education. Due to the demand for technically trained persons for manning the poultry farms started under the Second Five-Year Plan and also to provide training for those who want to take up poultry farming as a profession, a full-fledged four months course in Poultry Husbandry with a stipend of Rs. 30 per mensem per candidate has been inaugurated during this year and the first batch of one dozen students has already been trained and the second batch is undergoing training now.

In addition to this, farmers from the National Extension Service and Community Project areas are given practical training for a period of six weeks with a stipend of Rs. 20 per candidate per month. These trainees when they go back to their areas are intended to educate the ryots on scientific poultry breeding and production.

Apart from this, short lectures on poultry production are delivered to the various group of students from Educational and Agricultural institutions from all over the country who visit this Station.

Second Five-Year Plan for Poultry Development

Under the All-India Scheme for Poultry Development under the Second Five-Year Plan, 300 extension centres-*cum*-development blocks are to be



...c *Brooder which is called 'foster mother' can hold 100 chicks.* ...prc *are placed in separate devices and warmth is provided by* ...omm ...part of

established of which Madras State has been allotted 25 such centres. Of these, nine extension-*cum*-development blocks have been taken up during this year for implementation including three centres of the Pilot Project. The essential features of the scheme are :—

1. Rearing of 1,000 baby chicks at the Poultry Research Station, Madras.

2. Distribution of a trio (one male and two females) of five months age to 100 persons in intensive blocks at a concessional rate of Rs. 2 per bird.

3. Distribution of 10 birds (nine females and one male) at a concessional rate of Rs. 5 per bird for 20 persons in towns and cities.

4. Establishment of a 100 layer poultry demonstration centre in block areas for educating the ryots on scientific poultry farming and distribution of hatching eggs and breeding chickens.

5. Training of five farmers with a stipend of Rs. 20 per mensem per candidate for a period of six weeks at the Poultry Research Station, Madras.

6. Award of wirenetting to five deserving poultry keepers to protect their birds against predators at half cost to the extent of Rs. 50 for each.

Conducting one Poultry show.

The estimated cost of the Poultry Development scheme in Madras State for the Second Five-Year Plan is Rs. 22·5 lakhs of which Rs. 4,14,004 have been sanctioned for this year.

Poultry improvement in Key Village areas under the Second Five-Year Plan

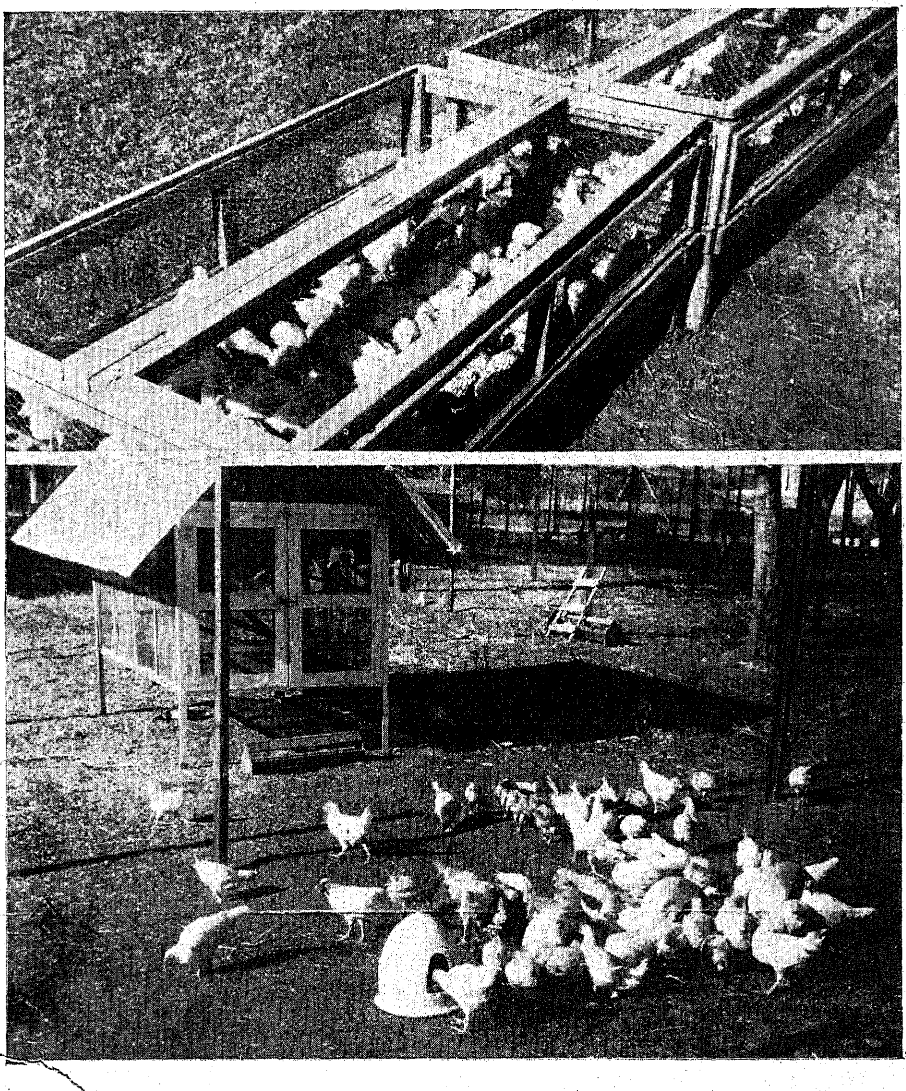
Three Key Village areas have been taken up during this year for the improvement of the indigenous village fowls by grading up by the introduction of exotic cocks in exchange for the equal number of indigenous cocks. Two hundred cocks and six incubators for each Key Village area will be distributed. A Poultry Show for each Key Village area at a cost of Rs. 400 will be conducted. This scheme during 1956–57 costs of Rs. 13,500. This is a State Scheme.

Subsidy to private Poultry breeders and associations

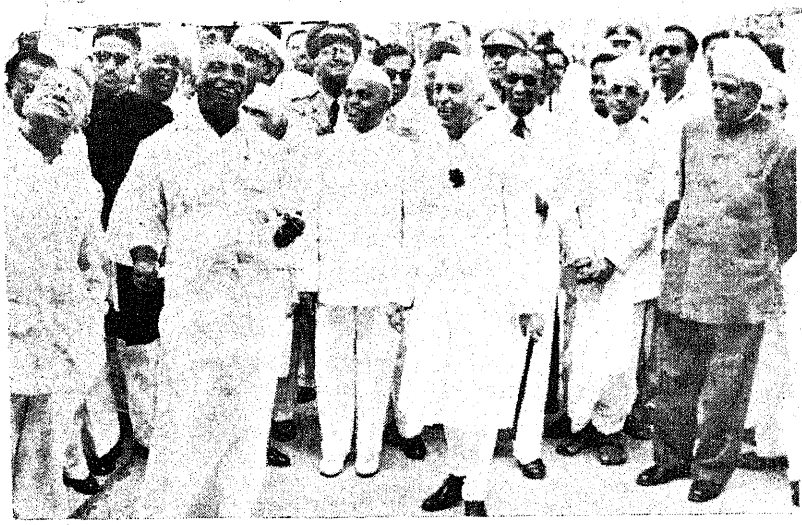
With a view to encourage poultry keepers, a sum of Rs. 8,500 sanctioned for the year 1956–57 for the grant of subsidy to 10 private poultry-breeders or associations. This is a State Scheme.

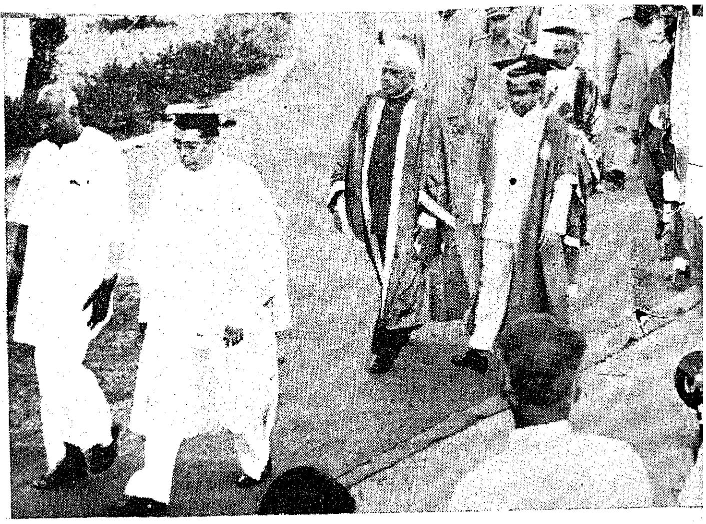
To meet the enormous demand and also to make the Poultry Research Station, Madras, as a first rate poultry farm and research station, proposals are being made to up-grade this station into a 1,000 layer farm.

Government have sanctioned the continuance of the scheme to maintain a flock of Mandya rams in the Livestock Research Station, Hosur, for a further period of five years, as the demand for sheep of this breed continues to be high. Under the scheme, the pure bred animals reared at the farm will be sold to breeders on a "no loss, no profit" basis.



Top : *A portable chick run with wiremesh flooring.* Bottom : *A poultry pen. Driniking water within the pen is kept in a vessel covered by a mud pot. Pollution which is cause for many kinds of diseases is prevented by this method. In the back ground is seen an all-metal poultry house with aluminium roofing to keep cool. Cross-bars for perching ... to prevent tumble foot and dirt.*

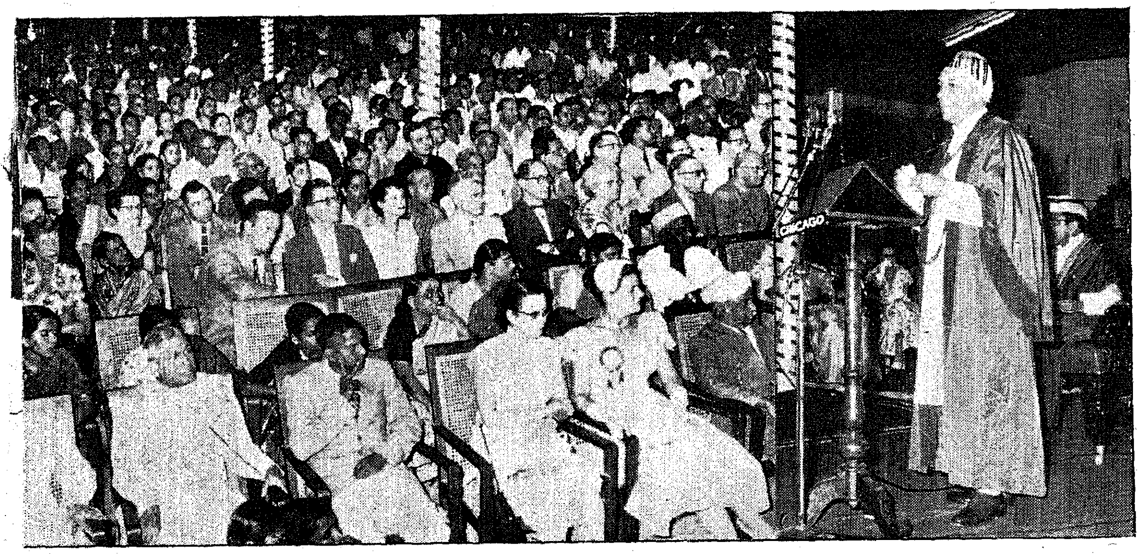




Left : *Prime Minister Nehru responding to the cheers of the citizens of Madras on his arrival at the airport.*

Right : *To the Senate House to receive Doctor of Laws* (Honaris Causa) *of the Madras University. He is led by the Chief Minister, Chief Justice, Sri C. Subramaniam, Pro-Chancellor, and Dr. A. L. Mudaliar, Vice-Chancellor. Governor Sri A. J. John, Chancellor, is with the Prime Minister.*

University Celebrations : Prime Minister's Visit :



Prime Minister addressing a large gathering of distinguished visitors at the Madras University Centenary Celebrations Pandal.

ꞁeft :—*The Prime Minister laying the foundation stone for a new building of the Madras University.*

ꞁight —*The model of the centenary building is watched with interest by the Honoured Guest, the Chancellor, Pro-Chancellor and others.*

One More Brid[illegible]

Rs. 11 Lakhs to be Spent to Conne[illegible]

Sri K. Kamaraj, Chief Minister, laid the foundation stone for a new bridge across the river Cauvery between Erode and Pallipalayam on 20th January. A large number of villagers were present at the function specially got up for the purpose.

This bridge which will pave the way for better communication and stimulate trade and commerce between Salem and Coimbatore districts will be built at an estimated cost of Rs. 11 lakhs. Of the total cost, Rs. 7·5 lakhs will be spent from the Central Road Fund and the remaining is to be met from the Contributions of the District Boards of Salem and Coimbatore and the Erode Municipality.

The bridge will consist of 33 spans of 40 feet clear. As hard rock is met with at the bed itself or at reasonably shallow depths, open foundations are proposed for all the piers except for a few piers in mid-stream which are proposed for well foundations resting on hard rock. The piers and abutment piers will be of vibrated cement concrete 1 : 3 : 6 mix. The decking of the bridge will consist of 3 T.beams supporting a deck slab, 8 inches thick. The entire decking will be of vibrated reinforced cement concrete 1 : 2 : 4 mix. Over this, a wearing coat of cement concrete 1 : 1½ : 3 mix to a thickness of 3 inches will be provided. The clear width of roadway over the bridge will be 24 feet. The bridge is designed to carry a 70-ton army tank which is the heaviest class of loading adopted for our bridges. About 1,500 tons of cement and 358 tons of steel are expected to go into this work.

At present large volume of traffic between Erode and Pallipalayam crosses the river through a ferry under difficult conditions. There have been many instances of loss of lives during floods while crossing the river in boats. As the river runs in a fairly deep course at this place and owing to the perennial flow in the river with numerous rock-out-crops in the river bed, the crossing is often hazardous. The alternative route from Pallipalayam to Erod[illegible] along the existing road bridges across Cauvery and Bhavani involves a tedious journey of 15 miles.

The long felt need

The need for a bridge at this spot was a long-felt one and the statement made by Sri K. K. Nambiar, Chief Engineer, Highways, will give a clear picture of the past attempts for the construction of the bridge.

" The necessity for a road bridge at this site has been a long-felt one. In the year 1951 the construction of the bridge was examined in consultation with the Coimbatore and Salem District Boards. This proposal was finally deferred by Government as contribution was not forthcoming. The alternative proposal for decking the nearby Railway bridge was also considered and deferred. Later on, in the year 1954, you may remember a proposal was formulated by the Lower Bhavani Area Community Project authorities to put up a bridge at this place at a cost of about Rs. 3 or 4 lakhs, the cost being shared among the Community Project, Erode Municipality and the District Boards of Salem and Coimbatore and if I remember right the Chief Minister was also approached to lay the foundation stone for the structure. When I was appraised of this proposal, I hastened to visit the place and made a careful inspection of the site of the proposed bridge. I made it clear to the people concerned that it will not be possible to put up a high level bridge at a cost of Rs. 3 or 4 lakhs, which amount was proposed to be raised by contributions from the District Boards of Salem, Coimbatore and Erode Municipalities and the Community Project. A low level causeway or a submersible bridge constructed out of this limited amount would not also be quite serviceable to the public, as it would be submerged for several months in the year. A high level bridge which could be used all through the year was the most suitable structure that could n[illegible] butions [illegible] previously. [illegible] to other sources [illegible] ject. Originally it the work could be fin[illegible]fit made of savings out of the amount [illegible] one seer for another bridge work from the[illegible]st of grant of the Government of India [illegible] Inter-State roads and works of economic importance. But the anticipated savings did not actually materialise in view of the estimated amounts of certain other works having been exceeded. Therefore, the work had to be included in the next list of works proposed to be executed under the Central Road Fund (State allocations). Thus there was an inevitable delay of nearly two years in getting the project sanctioned for execution."

Anti-Spurious Drugs Committee

To combat the menace of manufacture and sale of spurious drugs in the State, the Government have appointed an eleven-member Anti-Spurious Drugs Committee under the Chairmanship of Minister for Health, to hold office for three years. The other members of the Committee are :

Additional Secretary to the Government, Health, Education and Local Administration Department (*Vice-Chairman*).

Dr. U. Krishna Rao, M.L.A., Dr. P.V. Cherian, M.L.C., The Director of Medical Services in his capacity as ex-officio Drugs Controller; The Commissioner of Police, Madras; The Assistant State Drugs Controller, Madras; The Director of Public Health, Madras; The Government Analyst (Drugs); Sri K. Venkatapathi Naidu, President, Indian Pharmaceutical Association; and Sri Lal Chand Dadha, President, Chemists' and Druggists' Association.

Prince Narodom Sihanouk of Combodia accompanied by his daughter and Prime Minister passed through Madras Air Port on his way to Colombo. He was received at the Air Port by Sri W. R. S. Sathianadhan, Chief Secretary to the Government, on behalf of the Madras Government. Srimathi Sathianadhan and others were also present.

Prizes For Tamil Books

The Government have approved a new set of rules for the award of prizes for popular Tamil literature. The Prize scheme has been sanctioned for six years, in the first instance, from 1956-57. Under the new rules, Tamil books are to be classified into 20 groups, and 10 prizes of Rs. 1,000 each year will be awarded. Of these twenty groups the first ten will be awarded prizes in one year and the remaining ten in the next year and so on alternatively. So books published in each group during the two preceding years will be taken up for scrutiny every year. Only such books as are published during the specified years by living authors will be accepted for consideration.

The books will be classified under the following twenty groups for purpose of awarding prizes: 1. Poetry and musical composition. 2. Novel. 3. Research (language and literature). 4. Juvenile Literature. 5. Anthropology, Sociology, Geography, Politics and Law. 6. Economics and Commerce. 7. Mathematics and Astronomy. 8. Engineering and Technology. 9. Medicine, Physiology, Dietetics, Health and Hygiene. 10. Philosophy, Religion, Logic and Ethics. 11. Short story. 12. Drama. 13. Fine Arts. 14. Essays, Biography, Autobiography and Travel Literature. 15. Botany, Zoology, Biology and Forestry. 16. Physics and Chemistry. 17. Education and Psychology. 18. History and Archeology. 19. Agriculture, Animal Husbandry and Veterinary Science. 20. Notable Editions. There will be one prize only for each group. The particular book selected for the prize may be on any one of the subjects grouped together.

Translations and text-books have no place in the prize scheme, but very good translations of standard works will be separately considered, if sent. The same author will not be awarded prizes in the same group of subjects more than twice; but if it is found to be the best and deserving book of the year in that group, the prize certificate will [illegible] awarded to it. The book considered second in place will be given the prize money. The prizes, prize certificates and certificates of merit will be awarded on the occasion of the Tamil Festival to be held under the auspices of the Tamil Academy, every year.

Freshly Harvested Raw Rice

A Tip To Improve The Cooking Quality

DR. SREENIVASAN AND DR. DESIKACHARI,
Central Food Technological Institute, Mysore.

It is well known that raw rice cooks to a soft consistency and yields, upon cooking, a thicker gruel than parboiled rice which when cooked under similar conditions cooks to a harder mass, the cooked grains presenting a distinctly individual appearance. Those accustomed to eating parboiled rice would not therefore prefer raw rice for cooking. Habitual consumers of raw rice also prefer parboiled rice for preparation of dishes like *Idlis*, *Dosais*, etc.

Even consumers of raw rice will not like rice that cooks to a very soft and pasty consistency which is usually the case with rice immediately after harvest or with soft varieties of rice. The differences in cooking quality between raw rice and parboiled rice on one hand and between fresh rice and old rice on the other are of the same type and are due to the relative hardness in the structure of the grain. A hard grain will yield a thin gruel and cooks better than a soft grain.

There is therefore the need for a method of improving the degree of hardness of raw rice during cooking. The commercial parboiling of paddy achieves this objective on a large scale. In commercial practice, paddy is the starting material for parboiling. The protective husk on the rice grain will permit of a slow and even absorption of water during soaking and its removal during drying of the parboiled paddy. If rice in the milled condition is to be parboiled, the drying operation is difficult because the wet grain develops cracks on the surface on allowing to dry even in the shade. Such cracked grains will break when cooked as rice although it may be converted to semolina or flour for making *Idlies*, *Dosais*, etc. There will also be no nutr'tional benefits in the parboiling of milled rice because the starting material is itself very poor in vitamins and minerals. In spite of the above disadvantages in the parboiling of milled rice, those who are forced to consume freshly harvested rice either for economic reasons or because of the non-availability of old stored rice and also habitual consumers of parboiled rice who have, of necessity, to buy imported raw rice want a method of treating the milled rice in such a way as to harden and improve its culinary properties. The household practice of slightly roasting the rice with a little fat before cooking, or the addition of some oil to the cooking water to lessen the tendency for the grains to stick together during cooking confers only a slight advantage and cannot be considered sufficiently good or foolproof although they are simple to be adopted in the house. After a number of trials, the following method has been consistently found to give a good cooked rice free from pastiness and is simple enough to be adopted in the household.

Suggested method for improving the cooking quality of rice

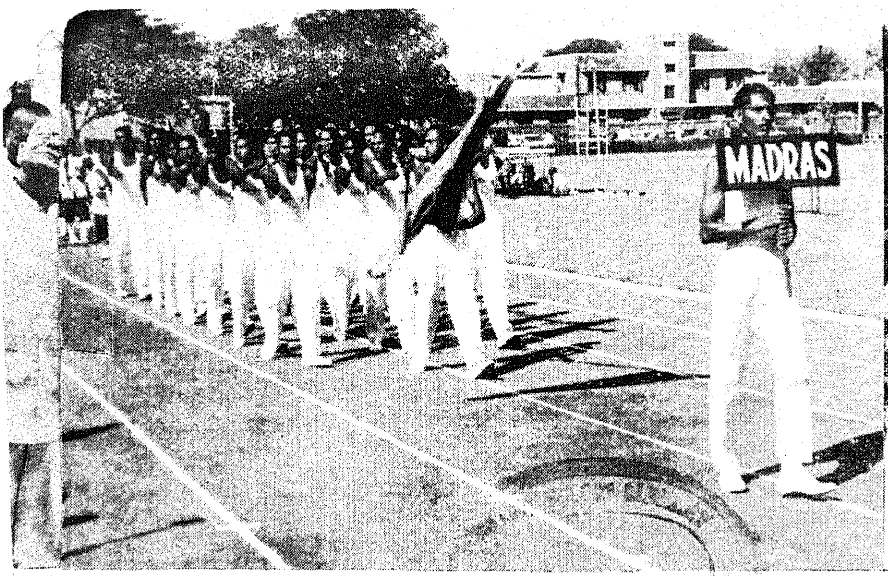
The rice is soaked in water for 3—4 hours prior to cooking so that it will absorb sufficient water to enable gelatinisation of the starch during the subsequent steaming. The soaked rice is kept in a perforated vessel (made of aluminium or brass) which is either suspended by means of a hook or supported in some other way in the rice cooking vessel. An Idli vessel or any other type of rice cooker which is available in the house can be used. Water is raised to boil in the cooking vessel, and the soaked rice is steamed in it for about 15 minutes. At the end of the steaming, the steamed rice is transferred to the boiling water in the vessel below and cooking continued in the usual way. Instead of transferring the rice from the perforated vessel, the vessel itself can be lowered into the boiling water. As the rice is already partially cooked during the steaming process, the later cooking takes about 10 minutes only. If steam cooking is done (this gives a definitely better rice than when cooked by direct heat), the gelatinised rice is transferred into the required amount of hot water and then steamed in the usual way practised in the household. The type of steam cooked used in the household is quite suitable for this.

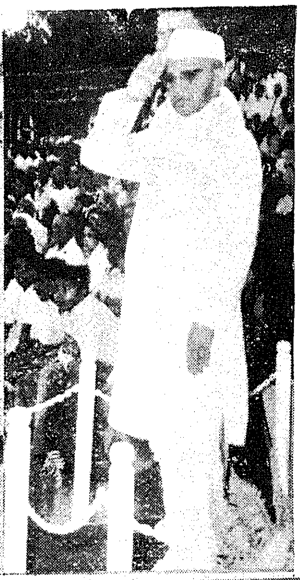
A complete cooking outfit made of brass and suitable for cooking one seer of rice can be got made at a cost of about Rs. 12–15–0. Suitable accessory equipment like lid and perforated steaming basket, etc., can be fitted to the usual household vessels at a cost of about Rs. 3–4–0.

Loans For Building Hostels

The Government of India have invited applications from educational institutions in Madras State for the grant of interest-free loans of Rs. 2 lakhs or less for the purpose of constructing hostels. It is expected that provision of suitable facilities for residence and studies will be a potent factor in improving the standard of education generally. The loan amount is recoverable in 30 yearly instalments commencing from the year after the commissioning of the hostel. Loan applications for the year 1957–58 must reach the Government of India by 1st May 1957, with the recommendation of the State Government. But in future years the applications must be submitted before October 15th of the year preceding the one to which it relates.

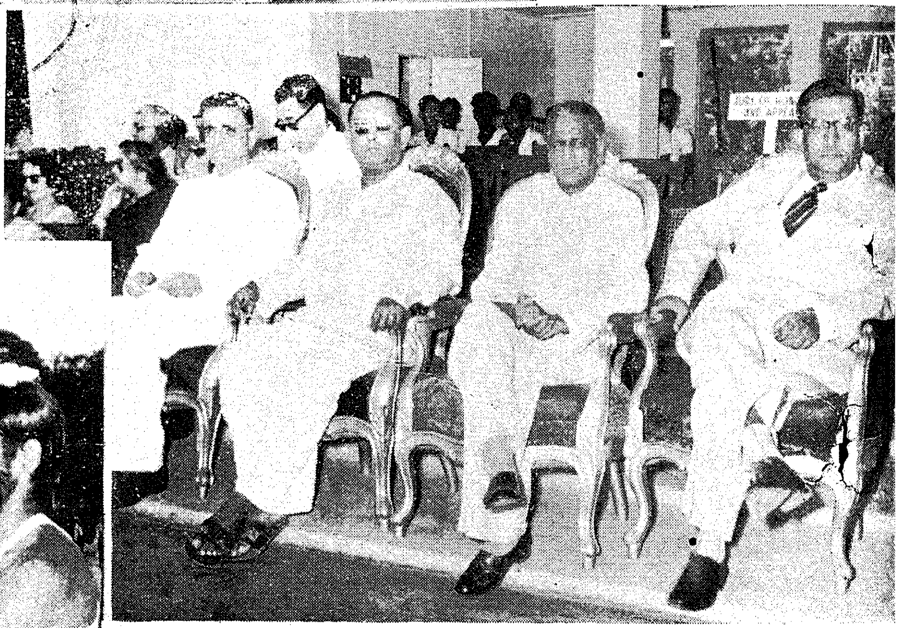
Affiliated Colleges which do not come under the purview of the Universities Grants Commission, High Schools, Higher Secondary Schools, Multipurpose, basic and social education schools and Teachers Training Colleges are eligible for the grant of this loan and preference will be given to institutions which are in metropolitan areas or which have no hostel facilities at present. Detailed rules will be furnished on application to the Deputy Secretary to Government, Health, Education and Local Administration Department.



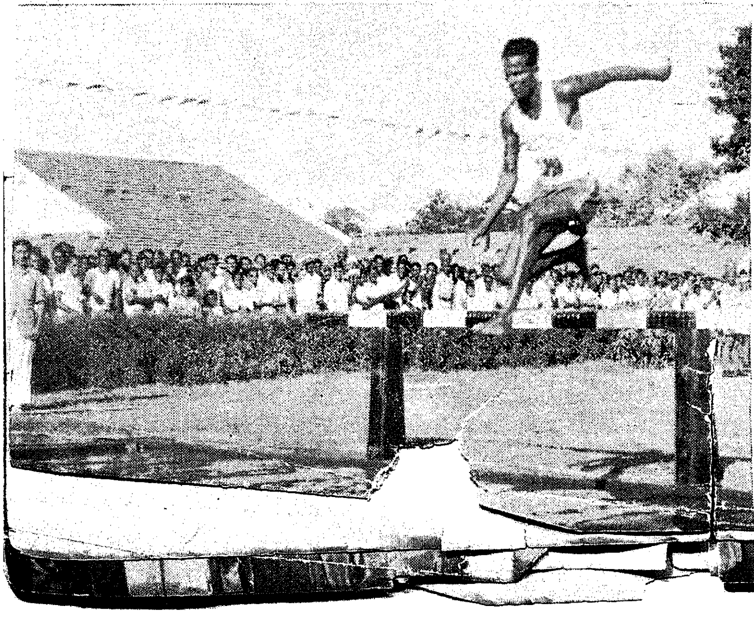


Sri A. J. John, Governor of Madras, taking salute at the march past of the athletes at the Rajarathinam Stadium.

The All-India Police Sports.



Left : *Srimathi John presenting the Trophy to the Captain of the Punjab Police Team which scored the highest number of points.*



Effective Administration of Labour Laws

Keynote Of The Government's Policy During The Last Five Years

The key note of labour policy during the last five years has been the effective administration of the labour laws rather than the enactment of fresh legislation. The improvement in the real wages of the workers, the implementation of the social security schemes like the Employees State Insurance, Employees, Provident Funds Act, Subsidized Industrial Housing Programme, etc., are some of the main features during the above period.

The steps taken by the Government to implement the various labour legislations are explained in the following article :—

The Employees' State Insurance Act, 1948, is an integrated scheme of insurance against sickness, maternity, employment, injury, etc. It was only in 1953 the Government decided that the scheme should be brought into force at least in one center, viz., Coimbatore and appointed an Administrative Medical Officer to study working of the scheme in Delhi and Kanpur so that the scheme could be introduced in this State. The scheme was inaugurated in Coimbatore, the major industrial town in the State in January 1955 where about 40,000 employees are not getting the benefit. The scheme has been extended to Madras City and suburbs from November 1955 where there are about 52,000 employees who are covered by the Scheme. The scheme has been extended to Madurai, Ambasamudram and Tuticorin from 28th October 1956 bringing within its fold 38,000 workers including 6,500 female workers employed in about 60 factories.

Minimum Wages Act, 1948

The main purpose of this Act is to secure to the workers of certain industries in which labour is not generally organized, a minimum wage for the day or month as the case may be. In 1952, the Government fixed minimum wages for all the employments covered by this Act such as stone-breaking, or stone crushing, public motor transport, plantations, etc. The notification fixing minimum wages fixed for tobacco workers was quashed by the High Court on certain technical grounds and the question fixing a fresh minimum wages for this employment is under consideration. The question of fixing minimum wages for agricultural workers is also under the consideration of Government.

The Government have also constituted in February 1952 an Advisory Board consisting of the representatives of employers and employees for advising Government in the matter of fixing or revising minimum wages. This Board was reconstituted in September 1954.

The minimum wages fixed originally for the employments in oil mills, rice flour or dhal mills and tanneries and leather manufactories have since been revised in December 1955 and September 1956 respectively. The Government also have constituted Advisory Committees for revising the minimum wages fixed for the employments in local bodies, plantations and public motor transport.

The Government have proposed to consider the question of extending the Act to more employments after minimum wages are fixed for tobacco workers and agricultural labourers.

The Employees' Provident Funds Act, 1952

One of the social security schemes of major importance, which have been introduced during the recent past, is the Employees' Provident Funds Act. It was first applied to six major industries, viz., cement, cigarettes, electrical, mechanical and general engineering products, iron and steel, paper and Textiles. The Act has since been extended to 17 other industries such as matches, sugar, rubber, tea, etc. The Government of India are considering the question of extending the beenfits under this Act to plantations, shops and other commercial establishments. This Act is of invaluable help to the workers in that it confers on them certain basic standards of retirement benefits. The liberalisation of the provisions of the Act to grant advances for housing from out of the Provident Fund accumulations is under consideration.

Factories Act, 1948, *and Madras Factories Rules*, 1950

It has since been made obligatory to make adequate provision of pure drinking water in all factories. Definite requirements regarding sanitation, accommodation, washing facilities, canteens and rest places have been laid down and a higher standard fixed.

Establishment of welfare officers is also compulsory where the number of workers justifies such provision. Detailed rules governing the strength of officers to be employed [illegible] to labour force, their qualifications, duties etc., were framed and they are being strictly enforced.

The general provisions of the Act, for the large factories, have resulted in bringing the standards of safety and of the safe working of plant up to the accepted standards of industrial nations of the West not only in the safeguarding of dangerous machinery but also in securing safe methods of working in the case of hoists and lifts, etc.

Plantations Labour Act, 1951 *and the Madras Plantations Labour Rules*, 1956

Rules have been framed governing the conditions of workers employed in plantations. The main provisions relate to housing and medical facilities. In order to encourage the planters in discharging their statutory obligation

1,30000 Workers Insured Against Sickness

of providing housing accommodation to all their workers, it is proposed to advance loans to them repayable in easy instalments.

Madras Shops and Establishments Act, 1947

Small establishment with less than three employees have been exempted from the provision of the Act, subject to the conditions that they give a weekly holiday to their workers, that no person employed works more than six days and that a register of wages and a visit book are maintained by the employer. Based on the recommendations of the Special Officer appointed to go into the working of the Act and on the lines of the Central legislation, ...rnment are considering the question of re-enacting the Madras Shops and Establishments Act, 1947.

Industrial Disputes Act, 1947

During 1951 the Industrial Disputes Act was amended by the Industrial Disputes (Amendment) Ordinance, 1951 (No. IX of 1951), by which power was given to the appropriate Government to include in the adjudication, cases in which disputes are apprehended. It was also made clear that the Industrial Tribunals cannot add to the list of issues furnished by the Government in the adjudication order and that the opinion of the Government for making reference under section 10 (1) should not be questioned.

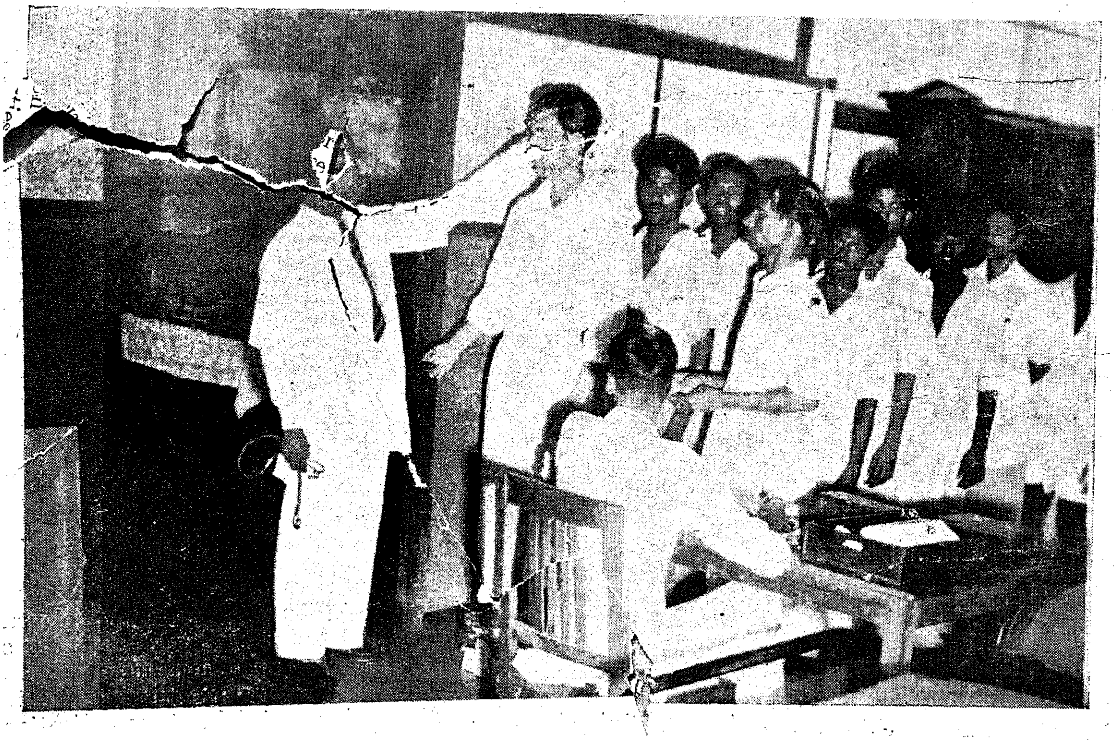
The most important of the amendments to the Madras Industrial Disputes Rules made in 1952 relates to the election of workers' representatives to the Works Committees. Previously, the number of seats for workers' representatives were distributed among the various registered Trade Unions of which the workers of the establishment were members, according to the strength of each union, at least one seat being allocated to each union, for workers who did not belong to any union, seats were allotted separately. Under the revised rules, no distinction is made between the members of the unions and non-members. All workers without reference to their affiliation to Trade Unions will thus have to elect all the workers' representatives.

In December 1952, two Tripartite Committees consisting of a Chairman, one independent member and six representatives (three on the side of the employers and three on the side of the workers) were constituted, one for the cement industry and the other for the minor engineering firms. The Committees' reports have been printed and made available for sale to the public.

During 1953 the Tripartite Textile Enquiry Committee submitted its final report to Government. This report also has since been printed and is available to the public.

Industrial Disputes

Out of 260 strikes and lockouts which arose during 1952, 131 disputes were amicably settled by mediation by the Government (Labour Department), 126 disputes were referred for adjudication by the Industrial Tribunals.



Factory Workers are examined periodically by experienced doctors under the Scheme of Insurance against sickness, maternity and employment injury.

Important Disputes.—(1) The industrial dispute between the workers and the management of the plantation estates in the districts of Coimbatore, Salem, Madurai, Nilgiris, Malabar and Tirunelveli regarding increased wages, etc., was referred for adjudication to a Special Industrial Tribunal constituted for the purpose.

(2) In the dispute between the workers and the managements of 32 textile mills in Coimbatore, the Industrial Tribunal gave its award in this year. The workers were awarded, *inter alia* six months' wages as bonus for the year 1948. The managements preferred an appeal to the Labour Appellate Tribunal. In its decision, the Labour Appellate Tribunal reduced the quantum of bonus to four months' wages. The managements then filed a writ petition in the High Court, Madras.

Meanwhile, in October 1952, Sri V. V. Giri, the then Union Minister for Labour and Dr. U. Krishna Rao, the then State Minister for Labour, met the representatives of the managements and workers at Madras and discussed all outstanding matters in the disputes. No settlement was, however, arrived at.

Prosecution against five mangements was ordered for non-implementation of the award of the Industrial Tribunal and contravention of the provisions of the Industrial Disputes Act.

During 1953, 61 industrial disputes were settled by mediation by the Government and 110 disputes were referred for adjudication.

Important Disputes.—(1) The closure of Madras Electric Tramways was referred for adjudication.

(2) The Government appointed the Labour Officer, Coimbatore, as Special Officer to scrutinize the claim of compensation of waste pickers and mechanics discharged due to the introduction of standardization scheme.

(3) The Southern India Mill Owners' Association settled the issue of bonus for the years 1948 to 1951 by agreement with the Coimbatore District Textile Workers' Union in October 1953.

(4) Conciliation in regard to the ... in plantation estates regarding bonus for 1950-51 and 1951-52 was held by the Commissioner of Labour during this year.

(5) The dispute in Messrs. Amalgamations Limited, Madras, was referred to Hon'ble Justice E. E. Mack, I.C.S., for adjudication. Most of the issues were settled during preliminary enquiry by the Tribunal.

Prosecution was sanctioned in three cases against the managements for non-implementation of the awards of the Tribunals and for the contravention of the provisions of the Industrial Disputes Act.

During 1954, 85 industrial disputes were settled by mediation by the Government and 163 disputes were referred for adjudication.

Important Disputes.—(1) The High Court, Madras, passed orders on 20th January 1954 winding up the Madras Electric Tramways and appointed a liquidator. On account of this, the Government could not take action to recover the arrears due to the workers except with the leave of the High Court. The Government therefore preferred Letters Patent Appeal.

(2) In the dispute in Simpson Group Companies, the efforts of the Commissioner of Labour to bring about a settlement were not successful. The Government therefore constituted a Special Industrial Tribunal manned by Sri E. Krishnamurthy, to adjudicate this dispute.

(3) Regarding the issue of bonus for the years 1952 and 1953 in the 32 textile mills in Coimbatore, the Government appointed a Board of Arbitration with Sri T. K. Palaniappan, I.A.S., as Chairman.

(4) The issue of bonus for 1952-53 to the workers in 257 plantation estates was referred for adjudication.

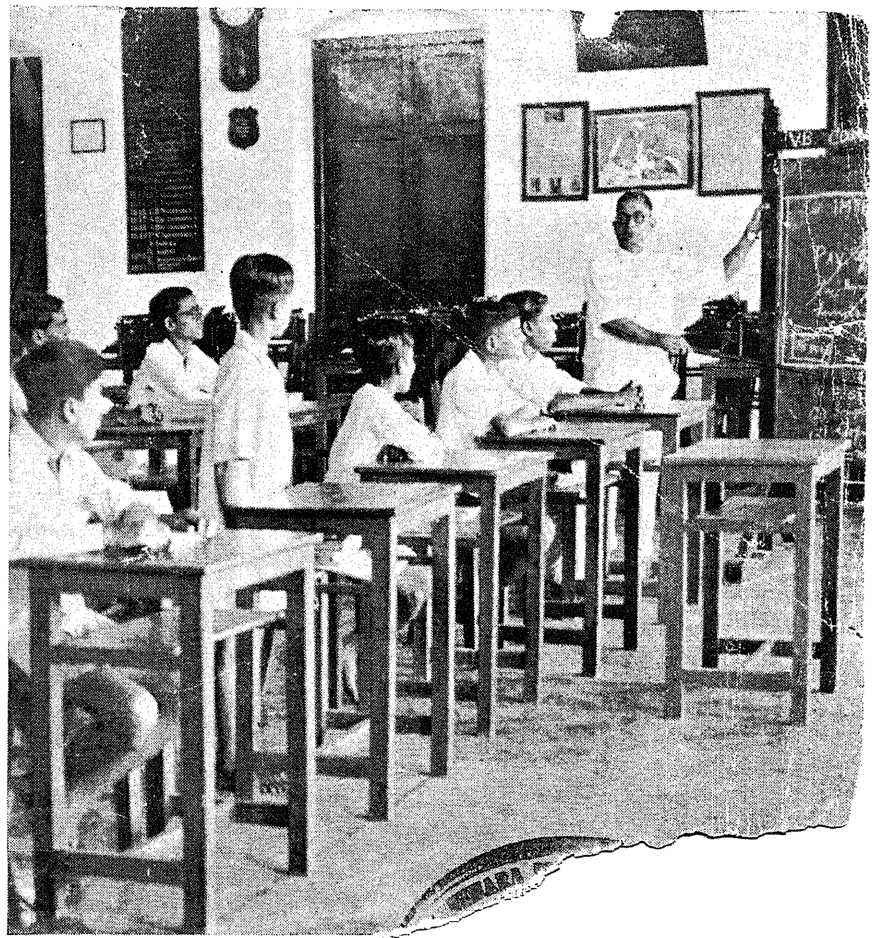
Prosecution was sanctioned against ten managements for non-implementation of awards of the Tribunals and contravention of the provisions of the Industrial Disputes Act.

Subsidized Industrial Housing Scheme

In 1952, the Government of India formulated the subsidized Industrial Housing Scheme under which financial assistance is offered in the sh...ion loan and subsidy for the constr...and of tenements for workers of ... of industrial establishments. Th...ered can be implemented by the ...ges Governments, Statutory H...rry- Boards, Co-operative Societie...heir in ...ome ...way ...ng. ...eti- ...les

(*Continued on page* 30)

A five-man West German Press Delegation which toured India at the invitation of the Union Government was in Madras on February 5. The members of the Delegation met City journalists and also were received by Governor Sri A. J. John at Raj Bhavan.



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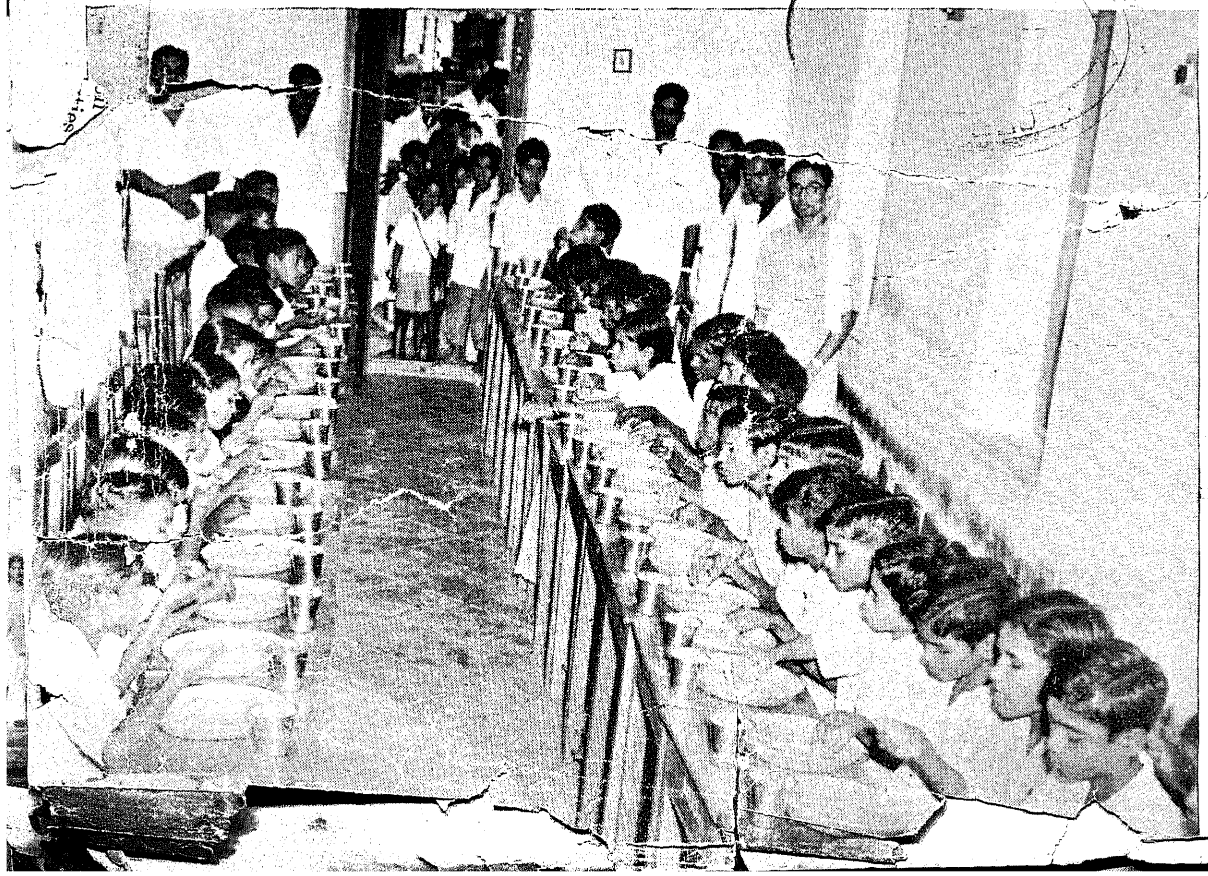


EDUCATION AT VARIOUS STAGES

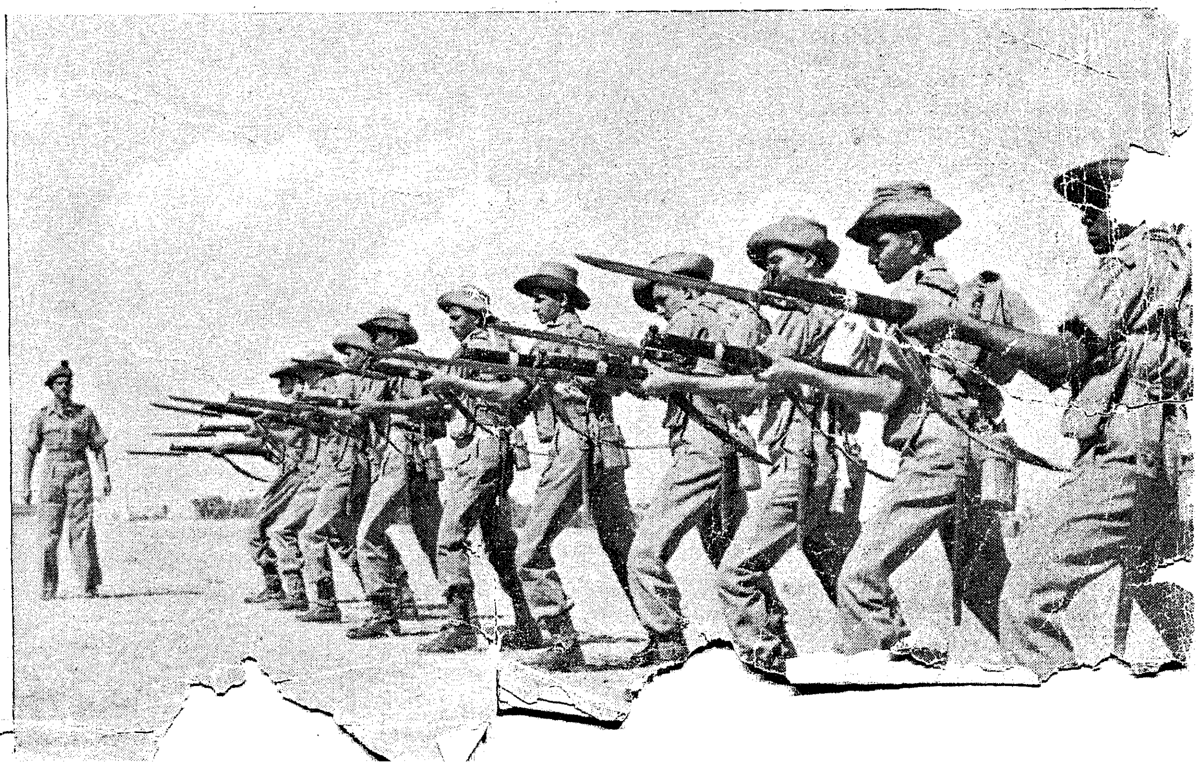
Top left: Pre-basic Education: The tiny tots before subjected to rigours of learning are taught love, tolerance and mutal good-will at the pre-basic level.

Top centre: Basic Education lays emphasis on the dignity of labour and learning a useful work

Top right: The Secondary Stage: The pupil at the Secondary School level, apart from being taught to become eligible to collegiate education, are taught commercial subjects like type-writing and accountancy.

Left: Midday meals to poor children: The Government have encouraged men of philanthropic temperament to bear the expenses of giving midday meals to poor children attending schools. Economic consideration is the main obstacle in the way of many a child attending the school.

Right: The Creati... N.C.C. has contri-



It's not how much but WHAT he eats that matters

GO-21

A heaped plateful of food is no indication of healthy childhood. Your child may eat plenty, yet show visible symptoms of bad nutrition — such as stunted growth, thin appearance, bad teeth, and susceptibility to cold. He lacks vitamins in his food.

Put him on ADAMIN (Concentrated)—nature's own source of vitamins A & D and watch his growth—rounder cheeks, healthier appearance and resistance to disease.

SEA GOLD blended SHARK LIVER OIL is a low cost, valuable fat food.

Adamin

Standardised to

Liquid	Capsules
Vit. A. 12,000 I. U. /Gm	6000 I. U. each
Vit. D. 1000 I. U. /Gm	1000 I. U. each

Sea Gold

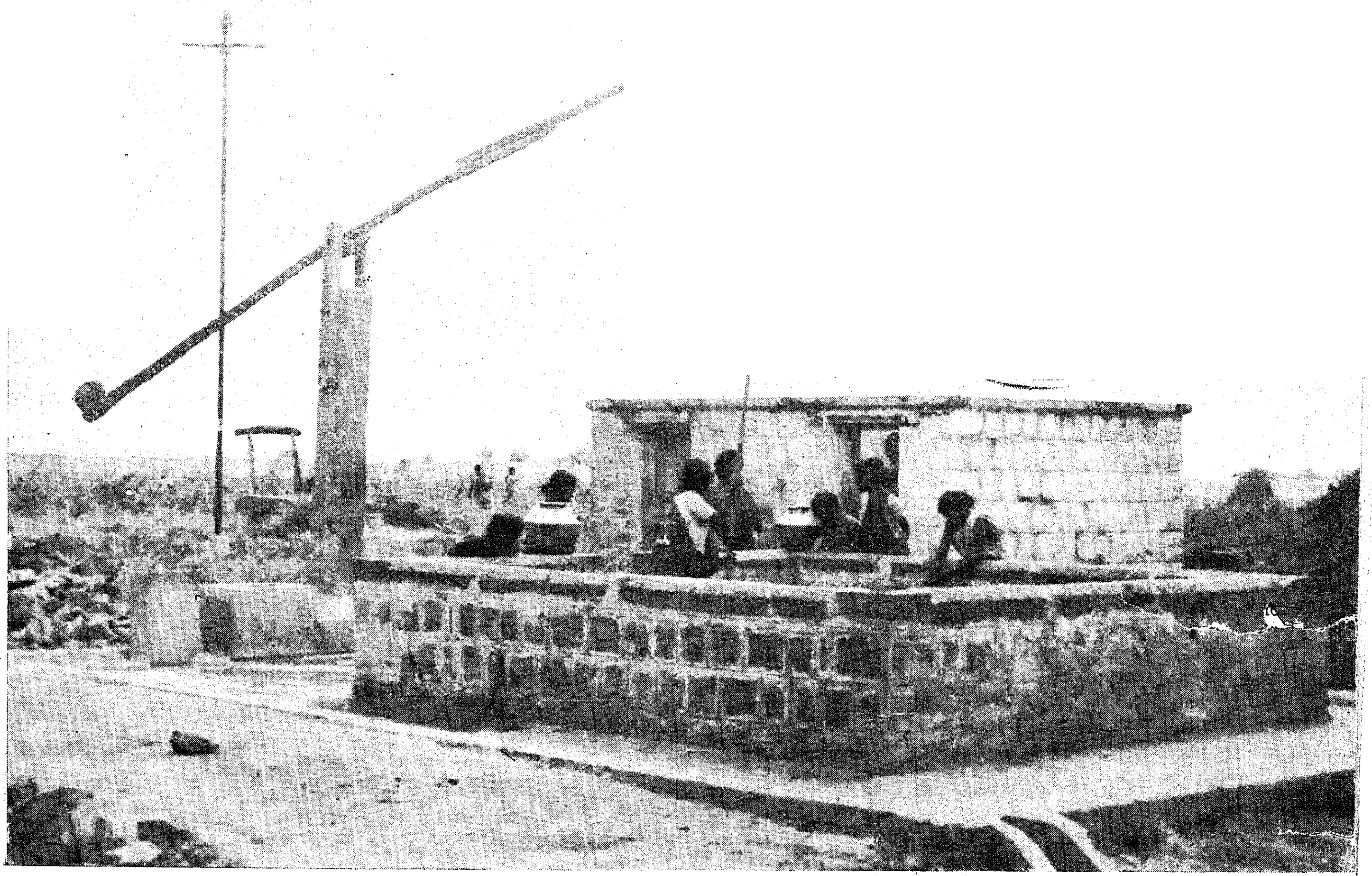
Blended
Shark Liver Oil

Standardised to
Vitamin A. 1,500 I.U.
Vitamin D. 100 I U.
per gramme

GOVERNMENT OIL FACTORY,

KOZHIKODE.

A DIVISION OF THE DEPARTMENT OF
INDUSTRIES AND COMMERCE,
GOVERNMENT OF KERALA



A drinking water well with attached bath rooms constructed in the Harijan Colony at Kallupatti near Mathurai.

Harijan Welfare Under the Second Plan

SRI A. SOMASUNDARAM, Assistant Secretary, Department of Industries, Labour and Co-operation.

It is needless to picture here the melancholy state of existence of the Backward Communities of our country in the old days or to trace the history of the movement for the uplift of the "Depressed Classes" undertaken both by the social and political reformers and the Governments. The Constitution of India has abolished 'Untouchability' and has forbidden its practice in any form. By putting on the statute book the Removal of Civil Disabilities Act, 1938 (as amended in 1947), which is intended to remove all disabilities imposed on Harijans by social custom and usage and the Temple Entry Authorisation Act, 1947, which has thrown open all public temples in the State to Harijans for worship—the Madras State can justly claim to have been the forerunner of the Constitution of India in this respect. Combined with these legislative measures, the enactment of the Untouchability (Offences) Act, 1955, by the Government of India has by law eradicated 'Untouchability' in all its form.

Since the people's Government returned to power in 1946, greater attention is being paid by the Government to the amelioration of Backward Classes. Increased provision is being made in the State budgets year after year for educational and social advancement of the 'Depressed Classes'. During the First-Five Year Plan period, the amelioration of the Backward Classes was not given as much prominence as other reconstruction works, but a few crores have been set apart for the full period for the general uplift of the Backward Classes for the entire Union.

Only in the Second Five-Year Plan greater prominence has been given for the amelioration of the Backward Classes. For the first time the Government of India and the State Government, drew up definite programmes and plans for the social, educational and economic uplift of the Backward Classes.

Under the Second Five-Year Plan the Government of India have made a provision of Rs. 497·81 lakhs for the development schemes relating to the 'Welfare of the Backward Classes' of which Rs. 91 lakhs are intended to be spent in 1956–57 as shown below:—

	Plan provision, 1956–61. RS. IN LAKHS.	*Provision for* 1956–57. RS. IN LAKHS.
Scheduled Castes	345·62	63·84
Scheduled Tribes	31·16	2·21
Ex-Criminal Tribes	65·79	11·50
Other Backward Classes	55·24	13·45
Total ..	497·81	91·00

Programme to Raise Socio-Economic Standards

(Continued from previous page)

The above provision made in the plan will be met by the Central and the State Governments on 50 : 50 basis.

In addition, the Government of India have made a provision of about Rs. 116 lakhs for centrally sponsored schemes wholly financed by them out of which Rs. 23·34 lakhs are proposed to be spent in 1956–57 as shown below :—

	Plan provision, 1956–61. RS. IN LAKHS.	Provision for 1956–57. RS. IN LAKHS.
Scheduled Castes	82·45	16·49
Scheduled Tribes	7·25	1·45
Ex-Criminal Tribes	27·00	5·40
Total ..	116·70	23·34

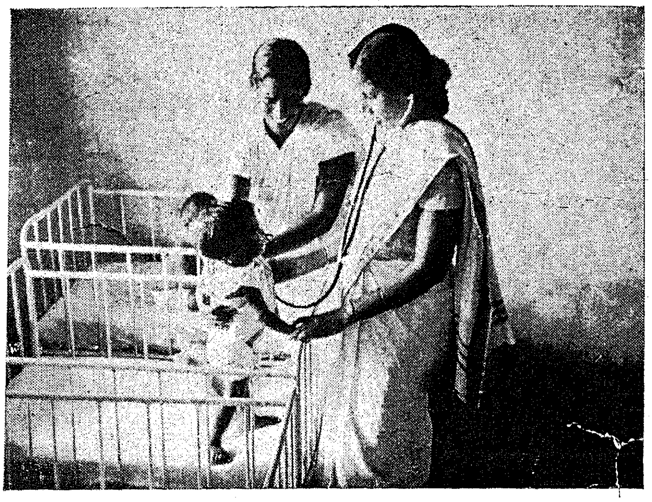
The balance of the plan provision will also be sanctioned shortly under 'Education' on receipt of final orders from the Government of India.

Scheduled Castes

So far the Government have sanctioned for implementation during 1956–57 grant-in-aid schemes to the tune of Rs. 41·58 lakhs on the following items :—

		RS. IN LAKHS.
1	Publicity ..	1·45
2	Education ..	12·22
3	Public Health ..	5·50
4	Industries ..	0·59
5	Housing	14·70
6	Agriculture ..	7·12
	Total ..	41·58

Under 'Publicity', the Government have appointed Deputy Sevaks and Assistant Sevaks in each district to undertake propaganda to eradicate untouchability. Non-official institutions like the Servants of India Society, Harijan Sevak Sangh, Sri Sathguru Sarva Samarasa Sangam, Coonoor, etc., are given grants to work for the removal of untouchability by conducting Bajans, appointing Pracharaks, etc. The schemes under 'Education' include the grant of scholarships, residential and non-residential boarding grants, supply of free midday meals to Harijans and non-Harijans, etc. The expenditure under 'Public Health' is intended for the expansion of the public health facilities for Scheduled Castes, provision of drainage, pathways, bath rooms, latrines, acquisition of house-sites, etc. The provision of Rs. 0·59 lakhs under 'Industries' is intended for the development of the foot-wear centres at Perambur and Triplicane to benefit exclusively the members of the Scheduled Castes. Under 'Housing' it is proposed to construct through the Government agency about 2,500 houses spread over the entire State at an estimated cost of Rs. 750 each and allot them to the Harijans. Out of the estimated cost, Rs. 550 will be in the nature of free grant while the balance of Rs. 200 will be met by the beneficiaries by way of supply of free labour.



Child Welfare Centres are run exclusively for Harijan children in Madras City and other places in the State.

Drinking Water Wells

Out of Rs. 16·49 lakhs sanctioned by the Government of India for expenditure during 1956–57 under the centrally sponsored schemes exclusively in the present Madras State for the welfare of Scheduled Castes, it is proposed to spend Rs. 2·62 lakhs for the construction of houses, Rs. 3 lakhs for construction of about 100 drinking water wells, Rs. 3·17 lakhs for the development of Cottage Industries like manufacture of glass bangles and beads, leather goods, spinning and weaving, etc., on co-operative basis Rs. 6·40 lakhs for grant of subsidy for purchase of plough bulls, seeds and agricultural implements at Rs. 285 per family ; and Rs. 1·29 lakhs for the grant of subsidy for purchase of tools and materials for technically trained Scheduled Caste members for settling in trade or business at the rate of Rs. 440 each.

Scheduled Tribes

The Government have sanctioned for implementation during 1956–57

Fair Deal to Backward Classes

grant-in-aid schemes to the tune of Rs. 5·27 lakhs on the following items :—

	RS. IN LAKHS.
1 Education ..	1·42
2 Cottage Industries.	0·55
3 Medical	0·93
4 Public Health ..	0·18
5 Housing	1·07
6 Women Welfare Centres.	0·75
7 Road works ..	0·37
Total ..	5·27

NOTE.—The above sanction includes provision for the composite State.

The provision under 'Education' is intended for the maintenance of schools, residential hostels, supply of books and slates and free midday meals. For encouraging the Scheduled Tribes to take to Cottage Industries it has been proposed to open a training-*cum*-production workshop at Kotagiri and to start eight training centres for imparting instructions to them in Cottage Industries. Additional mobile medical units are proposed to be purchased for the benefit of the Todas in the Nilgiris and the Malayalees in the North Arcot district. The provision under 'Public Health' is intended for supply of protected water to the tribal colonies. Under Housing, the Government have sanctioned the construction of 178 houses in the districts of Nilgiris and Coimbatore through the Government agency at a cost of Rs. 900 each and allot them to the families of Scheduled Tribes.

Under the Centrally Sponsored Schemes, the Government of India have sanctioned for implementation in 1956–57 the construction of 110 houses and 15 drinking wells in the Nilgiris district at an estimated cost of Rs. 1·45 lakhs.

Ex-Criminal Tribes

The Government have sanctioned for implementation in 1956–57 grant-in-aid schemes to the tune of Rs. 13·53 lakhs on the following items :—

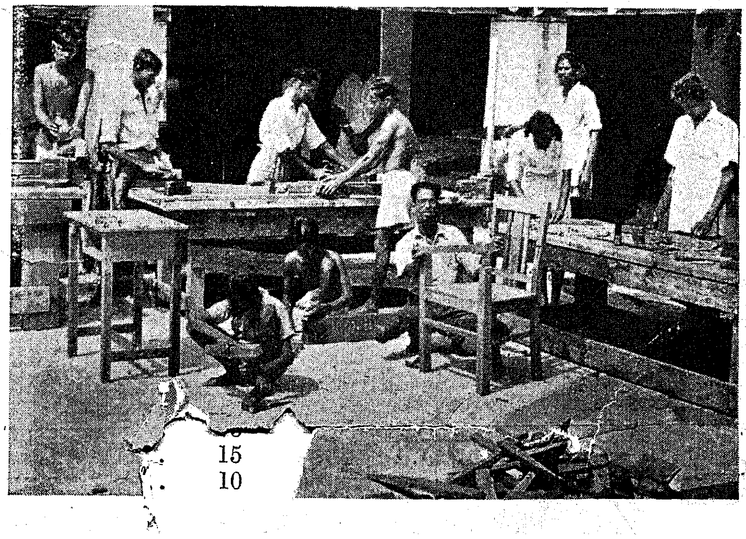
	RS. IN LAKHS.
1 Education ..	5·34
2 Agriculture ..	5·51
3 Public Health ..	0·30
4 Cottage Industries.	1·09
5 Housing ..	1·00
6 Miscellaneous ..	0·29
Total ..	13·53

The educational schems relate to the maintenance of schools, boarding homes, reading rooms and grant of scholarships, etc.

The provision under 'Agriculture' is intended for sinking of irrigation wells and grant of a loan-*cum*-subsidy on 50 : 50 basis. Under 'Public Health' it has been proposed to provide drinking water wells, construct latrines, etc., to the ex-Criminal settlements. With a view to develop Cottage Industries among the ex-Criminal Tribes, it has been proposed to grant scholarships to ex-Criminal Tribe students undergoing training in Cottage Industries like carpentry, weaving, etc.

Under Housing the Government have sanctioned the construction of 200 houses for the benefit of the ex-Criminal Tribes. The provision of Rs. 0·29 lakhs has also been made for the development of ex-Criminal Tribe Co-operative Societies in the Tirunelveli, South Arcot and Salem districts and the improvement of Aziz Nagar Settlement.

The Government of India have also sanctioned for implementation during 1956–57 of the Centrally Sponsored Schemes, an expenditure of Rs. 5·40 lakhs. Out of this Rs. 2·50 lakhs have been proposed to be spent on the construction of 716 houses at a cost not less than Rs. 475 per house for the benefit of the ex-Criminal Tribes. It has also been proposed to give a subsidy to the tune of Rs. 2·10 lakhs for purchase of plough bulls, seeds and agricultural implements at Rs. 285 per ex-Criminal Tribe family. It has also been proposed to develop Cottage Industries for the benefit of ex-Criminal Tribes and to give residential scholarships for students undergoing training in several technical institutions for which a provision of rupees eighty thousand has been made.



Technical knowledge is a sure way to success. Poor Harijan boys are given craft training in the Industrial Schools started by the Government.

Other Backward Classes

The Government have sanctioned for implementation during 1956-57 the development schemes to the tune of Rs. 17·27 lakhs on the following items :—

		RS. IN LAKHS.
1 Education	..	15·99
2 Medical ..	..	0·15
3 Public Health	..	0·09
4 Housing ..	..	0·79
5 Miscellaneous	..	0·25
Total	..	17·27

The Educational Schemes provide for the award of scholarships, boarding grants, examination fees, compensation to Universities, etc. It has also been proposed to supply medicines and anti-malarial appliances to Pulayars and other Backward Classes in Madurai and Coimbatore districts. The provision under Public Health is intended for the appointment of Public Health staff in the Lower Palni hills for providing sanitary amenities. Under "Housing", it has been proposed to construct a few houses for the Sugalis and Paliyars in Ramanathapuram district. The provision under 'Miscellaneous' is intended for the supply of clothing to Pulayars in Tirunelveli and Ramanathapuram districts.

All the above grant-in-aid and Centrally sponsored Schemes sanctioned during 1956-57 have been commenced and are at various stages of implementation by the State Director of Harijan Welfare. It is hoped that all the above schemes will be completed as much as possible before the close of the financial year. If for any unavoidable reason, it has not been possible to complete schemes which have been started during 1956-57, the balance will be carried over for implementation during 1957-58 in addition to the normal provision that would be made for those continuing schemes in the subsequent years of the plan period.

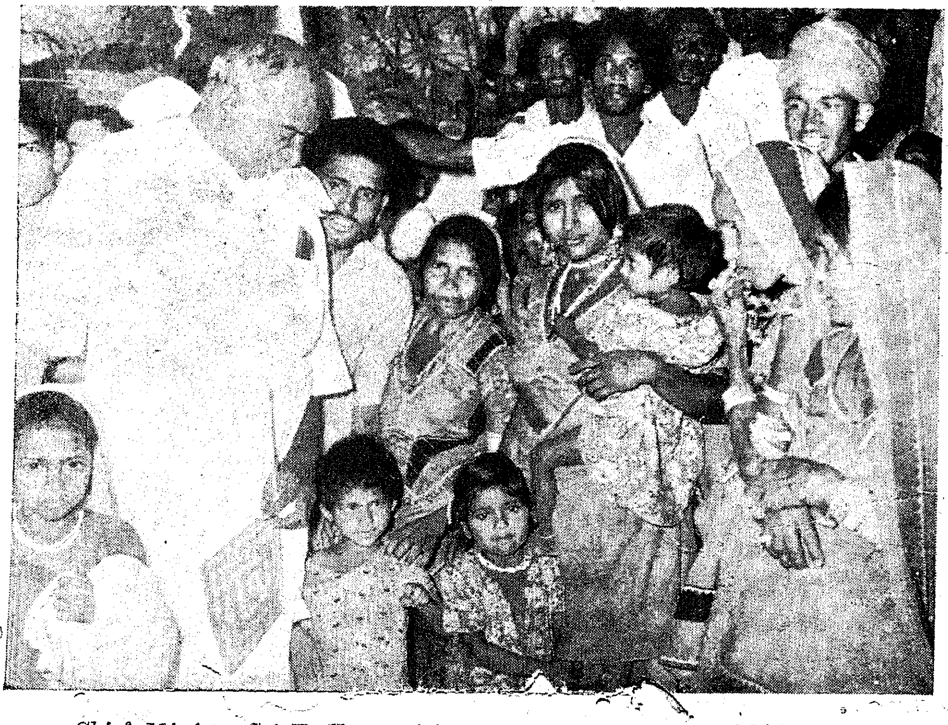
Education

Apart from the above development schemes for which specific allotments have been made for expenditure during the Second Five-Year Plan period, the Government of Madras have been taking various measures during 1956-57 calculated to improve the living conditions of the Backward Classes. During 1956-57 the Backward Classes continue to enjoy the concessions hitherto extended to them. Students belonging to Scheduled Castes and Scheduled Tribes are enabled to study in the educational institutions free of cost from the primary classes up to University stage without any discrimination. Scholarships both residential and non-residential are given to Harijan students. The Government have been running hostels for the benefit of the Harijans who come from rural areas and also subsidize private hostels. There are over 950 Harijan Welfare schools during 1956-57 run by the Government in the State benefiting 82,000boys and girls. TheHarijan pupils in these schools are supplied with free midday meals. There are 230 subsidized hostels and 24 Government hostels in the State providing free boarding and lodging facilities for Harijan and Backward Class pupils.

From 1956-57 the Government of India have undertaken to give scholarships to all Post-Matric students belonging to Scheduled Castes and Scheduled Tribes. As regards the other Backward Classes the Government of India have renewed for 1956-57 the scholarships of all Government of India scholarship-holders for 1955-56 who were admitted to the next higher class. Fresh scholarships are awarded subject to certain income limit to meritorious candidates securing marks of not less than 60 per cent in the last Diploma or Certificate examination intending to pursue under graduate course of studies and not less than 50 per cent in Degree examination for those intending to pursue post graduate studies. Women candidates securing 5 per cent less marks in each case will also get the scholarships.

In some cases the scholarships granted by the Government of India have been found to be inadequate to meet the actual requirements of the students. In such cases, the Government of Madras have undertaken to reimburse the difference. Further, as some delay happens in the actual grant of scholarships and to avoid the inconvenience caused to students, the Director of Harijan Welfare has been authorized to grant advances not exceeding Rs. 200 per student to be adjusted later when the scholarships are sanctioned.

Seats have been reserved in the Government Educational, Professional and Technical institutions for Scheduled Castes and Scheduled Tribes. Special scholarships have been instituted from 1956-57 onwards for the Scheduled Caste and Scheduled Tribes students



Chief Minister Sri K. Kamaraj is seen with the members of a hill tribe.

House-sites and Hostels to Harijans

undergoing Civil Aviation Course in Madras Flying Club and training in Sainik Course, Dehra Dun. The Government have recognized the B.D.S. (Bachelor of Dental Surgery) Course conducted by the Madras Medical College and the M.O.L. Course of Annamalai University for sanction of scholarships.

With a view to encourage the Harijan boys and girls, the Government have sanctioned the grant of gold and silver medals costing Rs. 50 and 10 respectively to the best Harijan boy and girl students who pass the S.S.L.C. Examination with the highest total number of marks among the Harijan students in each district.

The policy of the Government has been to gradually take over the management of all subsidized hostels now run by private persons. With this end in view the Government have discouraged from 1956-57 the opening of new hostels by private persons. Six new Government hostels were opened by the Government in the districts of Salem, Tiruchirappalli, Madurai, Coimbatore, Tanjore and Ramanathapuram. With a view to run the Government hostels on sound lines the Government have appointed Advisory Committees for each of the hostels to render advice in the matter of selection of boys and admission to hostels and to have a general supervisory control over their management.

Provision of house-sites and sanitary arrangements

During 1956-57 the Government have accelerated the pace of progress in the acquisition of house-sites for Harijans and for providing sanitary arrangements to the Harijan colonies. They have continued to provide house-sites to the Harijans including converts either by assignment of Government poramboke lands or by acquisition of private lands. In 1955-56, 1,608 house-sites were provided by acquisition at a total cost of about Rs. 4·3 lakhs. The amount spent from 1st April to 30th November 1956 was Rs. 2·25 lakhs against a provision of Rs. 5 lakhs for the current year. The Government have ordered the extension of the scheme for the provision of house-sites for the Harijans in rural areas to those in Class I panchayats also. The Government have also reserved all the waste lands in the villages for assignment to the Harijans including converts for cultivation. The Government have been evincing great interest in the provision of sanitary arrangements for the Harijan colonies. Burial-grounds and pathways are being provided to Harijan quarters. As already stated several development schemes have been taken to provide Public Health facilities for the Harijan quarters throughout the State. Steps have been taken to see that no Harijan colony with more than 20 families is without a drinking water well at the end of the Second Five-Year Plan.

The Government have sanctioned an expenditure of Rs. 1,750 during 1956-57 towards the purchase of 5,000 cakes of medicated soap for distribution to the Harijan families of Avanasi taluk under the scheme for the control of Yaws.

Eradication of untouchability

During 1956-57 the Government have taken a number of measures calculated to eradicate untouchability by associating the Harijans with the non-Harijans in several spheres of life and by propaganda. The Government have ordered the supply of midday meals to non-Harijan children also in Harijan welfare schools in the districts of North Arcot, Coimbatore, Nilgiris, Chingleput, Madurai and Tiruchirappalli. It is gradually proposed to extend this to other districts as well.

To avoid segregation of Harijans the Government have ordered that in subsidized hostels 10 per cent of the seats should be reserved for the backward classes and that the admission of boarders in Government hostels should be in the following proportions :—

		PER CENT.
Scheduled Castes	..	75
Backward Classes	..	15
Advanced Classes	..	10

The Government have also ordered that while constructing new colonies for Harijans, 10 per cent of the total number of houses in a colony may be allotted to non-Harijans who are prepared to take up residences among Harijans in the new colonies and to extend to them the same assistance made available to the Harijans.

The Government have laid down as a policy that Harijans are legally entitled to use all burialgrounds provided or maintained out of public funds and encourage the progressive throwing open of the private burialgrounds to all communities. Lands will not in future be acquired from public funds for providing burialgrounds for the exclusive use of any community other than the communities eligible for help by the Harijan Welfare Department even if that community provide the necessary funds. The burialgrounds so acquired for the use of Harijans will be thrown open to other communities also.

With a view to recognize the services of village headmen and other social workers who have rendered meritorious services for the removal of untouchability, the Government have ordered the grant of gold medals with suitable inscription so that it may serve as an incentive to other social workers to pursue the services unceasingly. Gold medals of two categories, Class I of the value of Rs. 100 and Class II of the value of Rs. 50, will be awarded to those who have done work like throwing open wells, helping entry into hotels, arranging marriage of Harijan girls or boys with other caste Hindus and Class II medals will be awarded to those who have done social work like facilitating entry into temples, social welfare work in Harijan quarters, etc. Two of Class I medals and six of Class II medals will be awarded each year in each district, the recipients of which may wear them on ceremonial functions and at functions connected with the uplift of Scheduled Castes.

The Government have issued orders directing that the term 'Cheri' should be dropped from usage in official records and correspondence and that instead the terms "colony" or "quarters" should be used.

The activities of the Government are not confined merely to the advancement of the educational and social conditions of the Backward Classes. Effective steps are also taken to settle the Harijans in different walks of life. As already stated the Government have provided in the development schemes technical training centres and grant of subsidies to technically trained Scheduled Castes and Backward Classes. The Government have also provided during 1956-57 for the grant of loans to persons of eligible communities and backward classes undergoing vocational training in the trades like electric wiring, blacksmithy, toy making, light metal casting, gas welding, etc., so as to enable them to settle down in these trades.

In respect of Backward Classes also, the Government have been granting educational concessions such as half-fee concessions in educational institutions, residential and non-residential scholarships, boarding grants, payment of examination fees, etc., from the year 1948-49. Expenditure on these items has increased steadily from Rupees one lakh in 1948-49 to nearly 13 lakhs in 1956-57. In order to ensure that the Backward Classes as well as the Harijans are assured of fair chances in securing admissions to educational institutions, the Government have passed orders that all educational institutions receiving assistance from the Government should provide for reservation of 16 per cent and 25 per cent respectively of the seats for Harijans and Backward Classes.

The Government have issued orders extending the concessions to the Dhobies and the Barbers who have been classified as Backward Classes the actual boarding and lodging charges paid to the Harijans. The Government have also recognized certain communities among the other Backward Classes as Most Backward and the educational concessions now applicable to the Scheduled Castes have been extended to those classes from the academic year 1957-58.

Cotton Ginning

Centre Sanctions Loan

The Ministry of Production has sanctioned a loan of Rs. 25,875, as subsidy for the development of ginning of cotton in the National Extension and Community Development Blocks in Madras State. The loan covers 50 per cent of the cost of purchasing 1,350 gins for 9 ginning units and the cost of purchase and supply of cotton to the units. Presently sanctioned for a year, the loan, which is interest free, is renewable for a further period, if continued assistance is required for the purpose.

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Tourist Coach for Madras State

The Madras State Transport Department has introduced a Tourist Coach built on uptodate and modern lines with graceful streamlines on a Leyland Worldmaster under-floor engined chassis.

Many special features are incorporated in the design and construction of the coach. The seats are of constellation type with provision to receline back with comfort. The seat cushions are of special foam rubber cushions with high back rest. The upholstery is of light brown PVC plastic leather cloth of pleasing design. The interior sides are lined with brown PVC plastic cloth of flower design, as also the roof and interior finishes which are of tampico beige.

At the rear is provided a toilet room with wash basin, soap dish, sanitary fittings, mirror, towel rack, coat stand, etc., for the convenience of the tourist passengers and is finished with ivory white. The flooring is of checkered aluminium plate. There is a overhead water tank of about 25 gallon capacity to supply water for washing purposes. In the off side corner of the rear is provided a stainless steel drinking water container with tap. In between them, besides the conductor seat, there is provision for keeping light luggage, picnic baskets, sporting materials, etc.

There are six hat or luggage racks on the sides of the interior. Fans and extracted type of ventilators are provided in the bus. The side window glasses are fitted with regulators to drop down when not required. Even when the glasses are raised, there is louvred ventilation on the sides. To avoid sunglare, pleasing cloth curtains are provided.

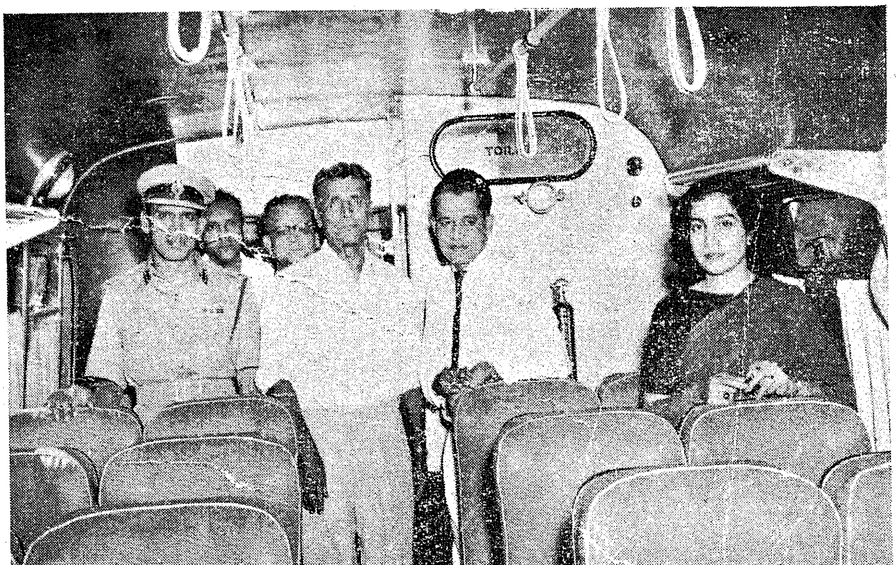
The illumination inside the bus is very attractive. Apart from nine dome lights there are special reading pillar lights. There are foldable writing desks in the front. There is provision for fitment of radio in the front. First aid box and fire extinguishers are also fitted up.

The front entrance *cum* exit has a jackknife pattern door so as to make the interior dust proof. The entrance steps are illuminated by a concealed lamp. There are stainless steel fittings like commode handles, grab fails, etc.

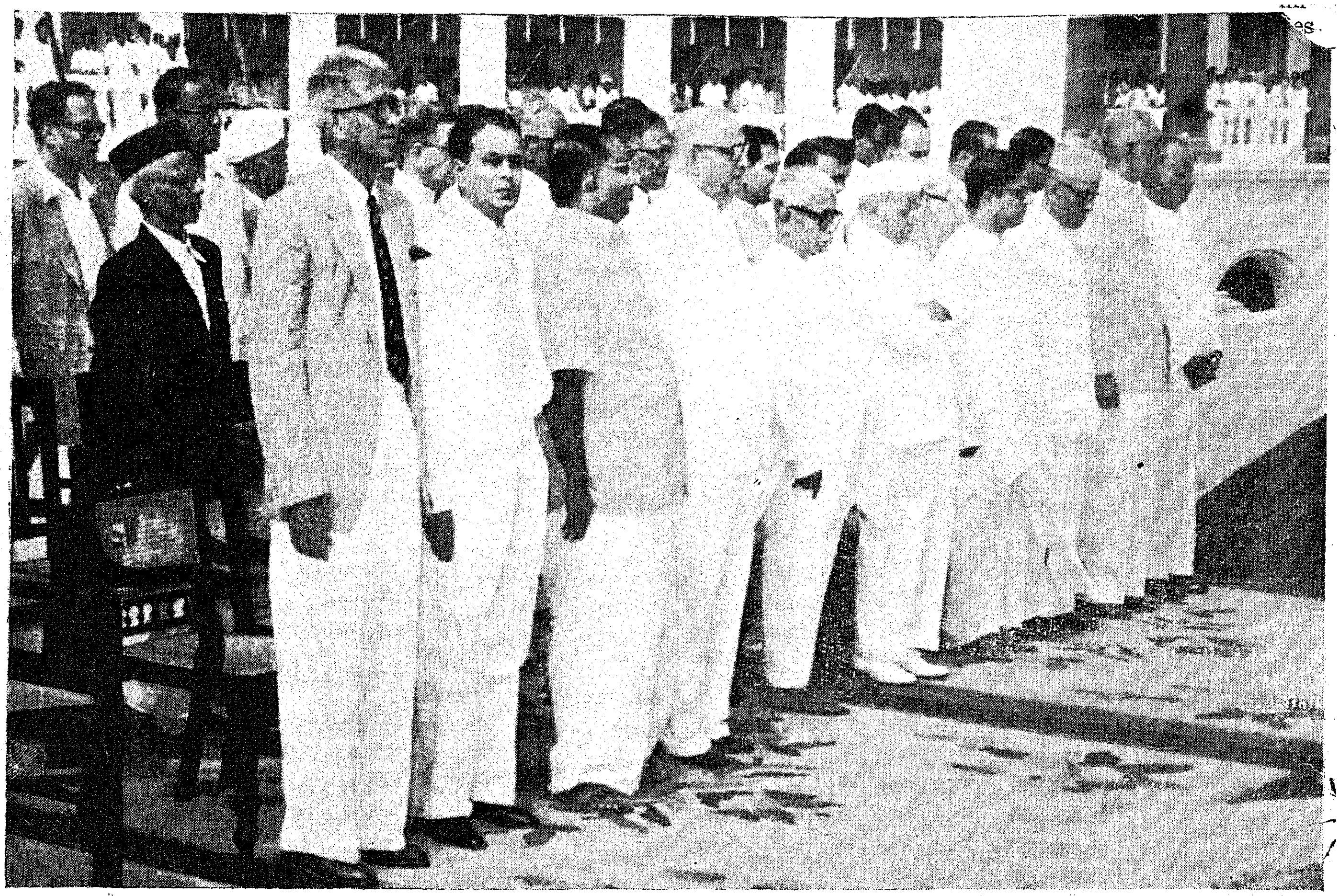
At the rear of the bus is provided a large size luggage boot with doors which can be opened out and closed with locking device. A detachable ladder is provided to climb up to the top of the bus to fill up water and clean the vehicle.

The coach is painted with signal red and ream on the exterior with streamline finish in front and sides. The get up of the entire coach is majestic and graceful. It gives excellent comfort for the tourists. The tourist coach is available for being chartered to places of interest.

The coach work was designed, constructed and finished at the State Transport Central Workshop, Chromepet.



The interior of the coach was inspected by the Home Secretary Sri Lobo Prabhu, Sri F. V. Arul, Commissioner of Police, and Sri J. Devashagayam, Honorary Director, Madras State Transport.



As a mark of respect to the heroes who laid their lives at the altar of freedom, Martyr's Day was observed throughout the State on January 30. At the Secretariat, the Governor, the Chairman of the Legislative Council, Ministers and Heads of Departments observed two minutes solemn silence before the flag-mast of the Fort St. George.

(*Continued from page* 17)

industrial workers and private employers. The standard cost of the different types of tenements (one roomed, two roomed, single storyed and double storyed, etc.), is laid down in the scheme. The loan and subsidy admissible based on the standard cost is as shown below :—

	Sub-sidy. PER CENT.	*Loan.* PER CENT.
State Government and Statutory Housing Boards	50	50
Employers	25	37½
Co-operatives	25	50

In February 1955, a scheme for the construction by Government of 936 single storeyed one-roomed tenements at Sembium and Erukkancheri (within City limits) was sanctioned at a cost of about Rs. 28 lakhs. The construction of these tenements is nearing completion and it is expected that the buildings will be ready by 31st March 1957. So far, an expenditure of about Rs. 17 lakhs has been incurred. The Government also propose to undertake construction of many more houses for the industrial workers wherever the managements of industrial concerns have offered to donate lands for the purpose. There has been a good response from the managements in this regard and the Government are actively examining the question of constructing houses in the industrial areas like Madurai, Coimbatore, etc. Sites have been selected and the applications together with plans and estimate will be submitted to the Government of India shortly for approval of the scheme and sanctioning of financial assistance.

2. The Government of India have also been sanctioning assistance direct to the private employers for construction of houses for their workers under the Subsidized Industrial Housing Scheme.

3. Co-operative Societies are also taking advantage of the scheme. The Housing Scheme of the Coimbatore, Peelamedu Co-operative Industrial Housing Society has been approved by the Government of India and the Housing Scheme of the Coronation Litho Works is under consideration. It is also expected that some more societies would be forthcoming to avail of the assistance under the Subsidized Industrial Housing Scheme.

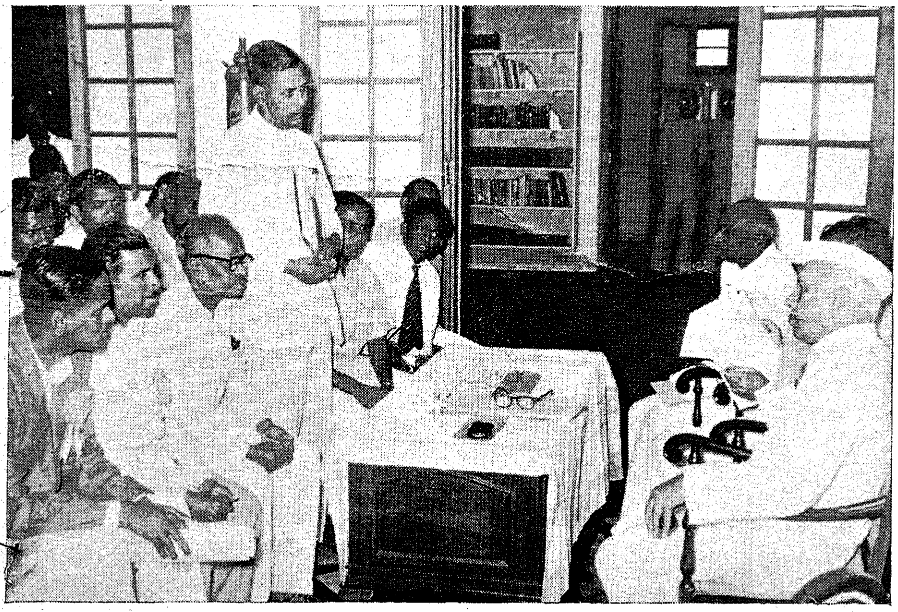
NEED FOR BLOOD BANKS

SRI T. PURUSHOTHAM, M.L.C., Member, State Public Health Board.

Every war time device or discovery has its peace time use. The Second World War showed us the ingenious use of blood to restore humanity torn and devastated by inhuman ravage. All wars are termed bloody, due to the fact that there is free flow of blood in the battlefield. Life cannot exist without blood. When human life is in peril due to loss of blood, it is only transfusion of blood that could save. Blood cannot be manufactured in a laboratory. It is only human system that can produce it. So loss of blood has to be made good by transfusing it from another person.

The war was over. The success of blood transfusion set the medical world thinking. Loss of blood in case of accidents, surgical operations and diseased conditions presents an acute problem. Blood transfusion has saved many lives during the war. This method of treatment is adopted everywhere now. In Madras State, we have a Blood Bank Department in the King Institute, Guindy. The Government have equipped the department with medical officers in the technique of blood transfusion and resuscitation.

The need for blood bank is quite apparent. We cannot go asking persons to donate blood as and when required. So, we have Blood Banks where human blood is stored in most up-to-date hygenic conditions. Blood is taken from willing donors, chemically treated and stored in sealed bottles in the Frigidaire. In Western countries, blood banks are functioning most satisfactorily with the assistance of voluntary donors. We look forward to popularisation of the scheme and creation of such healthy conditions in our country. This is the highest form of charity, saving the life of others by a little blood donation. Ours is a most charitable land. Tradition has it that a Chola King by name Sibi did not hesitate to cut out his flesh to save a dove! Noble example, worthy of emulation. But not flesh, only a little blood! A little quantity of blood is required from each donor. It is only from healthy persons this is taken. The donors are tested first and absolutely no harm is caused to the donor by the process. There are no ill-effects, no after-effects at all to blood donors. This fact needs emphasis to remove all misapprehensions in the minds of the public.



Prime Minister Sri Nehru received a deputation of Non-Gazetted Officers of the State Government at Rajbhavan immediately after his arrival on January 31. Sri T. T. Krishnamachari, Union Finance Minister and Sri K. Kamaraj, Chief Minister, were also present.

Blood Banks have been opened in all the Government District Headquarters Hospitals in Madras State. Last to be opened was the one in the District Headquarters Hospital at Chingleput. This was last month. The District Medical Officer made it a public function. After the formal opening, the medical officer in charge of the new Blood Bank himself gave the first donation of blood. This practical demonstration had its marvellous effect. The large gathering of men and women were impressed and one by one they came forward with their offer of blood. The medical officers and nurses cheered and encouraged them. It was voluntary offer that day in spite of the assurance by the District Medical Officer that under the rules a cash reward of rupees five will be given for every blood donation. The Blood Bank Department is a most useful institution. The results so far have been satisfactory.

More propaganda is of course necessary. A mobile van to collect blood donations and treat patients in rural areas is needed, one for each district. The expansion of this department should receive proper consideration in our national plans. Propaganda material and Tamil pamphlets should be prepared and wide publicity should be given. We are glad to note that the Government have organised the holding of 'Hospital Day' celebration in all the District Headquarters Hospitals as a novel feature this year to get the public interested in the working of the State hospitals and as a courtesy drive among the hospital staff. Side by side, I wish medical and health exhibitions are arranged in the District Headquarters Hospitals, with special demonstration of blood transfusion methods for effective propaganda and enlistment of voluntary donors for Blood Bank.

The Metric System in Industry

The Problem Of The Screw

During the last war, Britain, U.S.A. and Canada met in conference to decide on a uniform system for screws. It had become a problem to deal with replacements and repairs of defective equipment because the screw threads of the Allied countries varied. For instance, a British vehicle could not be repaired in the U.S. Workshop ! The Unified Screw Thread System was evolved.

A similar realisation of the value of a uniform system on the part of the trade led to a resolution adopted by nearly 1,000 delegates of the International Chamber of Commerce in 1939. It said, "the introduction of a uniform system in all countries should undoubtedly obviate much of the vexatious and superfluous calculations. A large majority of nations having adopted the decimal metric system of weights and measures, it is highly desirable that all other countries follow suit".

The main advantage of the metric system is its capacity for speed and accuracy both in regard to design and manufacture. In India the value of the metric system has been anticipated in some of the new industries in the public sector. The Bharat Electronics, The Hindustan Machine Tools Factory, and the Hindustan Shipyard are a few examples.

Ball-bearings and rollers, the most important and widely used machine parts in all industries, are universally standardised only on the metric system. The British Standard Specification gives the same table also in millimetres.

The foot-pound system already employs decimals for measurements below unit, instead of fractions. The technical data are given in tolerances based on decimals. The unit of accuracy is a *thou,* i.e. ·001 of an inch. In the metric system the limit of accuracy, fixed by the International Standards Association, is, ·001 of a millimetre. Thus the metric system permits of accuracy about 25 times greater than the normal working standards of the foot-pound system (1 inch = 25·4 mm). For comparable accuracy on the foot-pound system, it is necessary to work up to the 6th decimal place which makes calculations cumbersome. It is estimated that in the preparation of drawings and specifications alone, the metric system will result in a saving of 30 per cent of the time in any industrial establishment. In industries, such as the manufacture of sewing machines, typewriters, motors, etc., this higher degree of accuracy is of great importance.

Effects of the change

A survey of the implications of the change to the metric system in industry indicates that it would not involve any large-scale purchase of new equipment. The main reason for this is that a machine tool permits of production in the metric stysem or inch system, irrespective of the system in which it is itself made. Certain small jigs and tools may have to be renewed but these are in any case subject to normal wear and tear and so they can be replaced on the metric system when the next normal replacement becomes due.

Surveys conducted during the last three years have shown the readiness on part of industry in India to change to the metric system. The change-over to the metric system, however, is to be gradually spread during the ten-year period from 1958; the metric system will run concurrently with the inch system for a while.

The working of the two systems side by side would help workers to get themselves gradually familiarised with the new system while the necessary drawings and designs are being drawn up. Manufacturers have expressed the opinion that training of labour is much easier under the metric system than under the inch system.

Textile Industry

In the textile industry, silk and rayon sections already work on the Denier system which is based on the metric system. The cotton textile section may require some recalibration of testing equipment. Since this section mostly employs machinery imported from either Europe or Japan where the metric system is in vogue, there may not be much difficulty.

The change-over to the metric system is expected to bring great advantages to the textile industry. Today different units are used to express the quality of yarn, with the result that comparison between various products is not easy. The adoption of the metric system will facilitate uniform expression of the quality in the various sections—mill-made, handloom, powerloom, etc. This will help to promote healthier competition and more rational development of the industry.

Co-ordination necessary

It is also necessary to have correlation and co-ordination between the various branches of industry, in general. It is no use, for instance, producing tyres and tubes on the metric system of the automobile or bicycle industry continues to turn out wheel rims on the inch system. It is necessary to have large quantities of standard measuring and filling pots on the metric system. Jars, flasks, buckets and conveyor belts, etc., will all have to be redesigned.

By far the most important factor for the successful change-over to the metric system is a change in the pattern of thinking on the part of those who control and use the equipment. The change-over need not be difficult as evidenced by scores of American engineers going out to work on projects in Europe and other countries where the metric system is prevailing. It is believed that apart from adopting themselves quickly to the change, they have returned wholly converted to the metric system.

Careers In The Armed Forces

Opportunities for Young Men In Technical and Non-technical Work

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In a country like ours, choice of careers constitutes a difficult problem for three reasons. Firstly, the man-power in our country is in such a great surplus that there are not enough opportunities for all the able bodied who would like to be gainfully employed. Secondly, there is a lack of vocational guidance and counselling to the teen-agers with the result that the school-leavers do not know how to choose a career. Thirdly, the agencies for placement work are not adequately equipped to deal with the high percentage of unemployment.

There is a misconception that careers in the Armed Forces are meant only for the martial races. Armed Forces are not a monopoly of the martial races only but are avenues of employment for every able-bodied citizen of our country, and especially for the educated youth who can harness their mind, body and faculties to the cause of peace, national defence and internal order.

The Armed Forces of Independent India have been raised to defend our land against external aggression and to assist the Government to maintain law and order in our land. The strength of the Armed Forces depends on the strength of those who pledge themselves to unstinted service. Service in the Armed Forces is no longer mercenary as they are part of our country and therefore part of us.

Numerous opportunities arise in the Armed Forces for various types of technical and non-technical work. In fact, several opportunities which are generally not available in civil life open out in the Armed Forces. There are chances for short and long term employment. The Armed Forces serve as a unique field not only for service and sacrifice, but also for careers for the youth of our country. The training that is imparted in the Armed Forces contributes to the development of the mind and body of those who enrol themselves. A high sense of discipline that is maintained in the Forces is not ordinarily seen anywhere outside these Forces. Apart from the benefit of training and discipline that one could derive, there is ample scope for imbibing the spirit of team work and co-ordinating complicated aspects of work in a systematic way.

Scope for young men

In the Army, there is scope for young men to be trained in the Joint Services Wing, the Military Wing, the N.C.C. and the Graduate (Technical Course). In these four branches, young men are trained to become worthy officers of the services. The Joint Services Wing trains cadets for service in the Army, Navy and the Air Force. A candidate for training must be single male between 15 to 17½ years. The minimum educational qualifications required is Matriculation or Cambridge School Certificate. The selection is made on the basis of combined results on a written examination conducted by the Union Public Service Commission, and an interview held by the Services Selection Board. Those selected receive training for two years at the National Defence Academy and thereafter further training for two years at the respective Academies.

The age limit for entry into the Military Wing is 18 to 21 years, subject to the condition that the applicant is single. The educational qualification required is Intermediate or Cambridge School Certificate examination. The candidates are required to qualify in a written examination conducted by the Union Public Service Commission and thereafter in an interview before the Services Selection Board. The final selection is made on the combined results. The selected candidates receive two years' training at the National Defence Academy.

In order to give an impetus to the personnel of the National Cadet Corps direct entry into the N.C.C. has been arranged for a limited number of candidates. The conditions for such entry is that the candidates should be male, single between 19 and 23 years of age and must have a degree of a recognized University, hold certificate 'C' and must have served at least three years in the Senior Division Army Wing of the N.C.C. The Selection for these courses is made by an interview by the Services Selection Board and the selected candidates undergo one year's training at the National Defence Academy.

The Graduate's course is open to applicants of ages between 20 and 27 with an Engineering Degree or a first class Honours Degree in Physics. The minimum pay for a Junior Officer is Rs. 350 plus a proportionate Dearness Allowance and Kit Allowance. A promising young man who is successful in the Army, Navy or Air Force has a reasonable chance of getting promotions.

As regards the other ranks, young men can enrol themselves as combatant sepoys or as boys or as non-combatant watchmen, barbers, etc., in the Armoured Corps, Artillery, Engineer Signals, Body Guards, Infantry, Army Medical Corps, Electrical and Mechanical Engineer (E.M.E.), Remounts, Veterinary and Farms Corps (R.V. & F.C.).

All combatant recruits are first trained as fighting soldiers and then given the training in the trades for

Life Is Tough But Interesting

which they are selected. Recruits for training as Clerks, Key Board Operators Line Operators, Wireless Operators, Electrical Fitters, Line Mechanics, Radio Mechanics, Telegraph Mechanics, Instrument Mechanics, and Tele-communication Mechanics must be Matriculates. The minimum educational qualification for the other recruits varies from I to V Form.

Minimum Standards

All recruits are required to conform to certain minimum prescribed standards of physical fitness and to be within certain age limits. The minimum standards of height, weight and chest measurements vary according to the class or area of residence and branch of the service. The minimum standard is 5 feet 4 inches in height with a chest measurement of 32 inches to 34 inches. The educational standard for boys joining the Army vary from I to V Form. On attaining the age of 17 they are transferred to men's service in the same branch they served as boys. In addition to normal military training, they are given education during the period they are in the Boys Company. They can appear for Indian Army Education Examinations up to the Indian Special, the passing of which is equivalent to Matriculation.

For the purpose of pay, combatants are grouped into eight different groups, the highest class being I and the lowest class III or IV as the case may be. The lowest rate of pay of a Class III soldier is Rs. 25 per mensem and the highest pay of Class I soldier is Rs. 90 per mensem.

Recruitment to the Navy is done for the various branches such as Communication, Cooks, Electrical, Engine Room, Medical, Musician, Radio-Electrical regulating, Seamen, Stewards, Topasses and Writers. Besides, Artificer apprentices are recruited. The age limit for boys is 15½ to 16½ years, for Artificer apprentices 15 to 17½ years and ratings 17 to 20 years. The educational qualifications required for boys is VI Class, and for artificer apprentices, Matriculation and for ratings VII Class.

The Indian Air Force presents many opportunities for enterprising young men to be recruited either as officers or other ranks. Recruitment to the rank of an officer is made through an examination conducted by the Union Public Service Commission followed by an interview before the I.A.F. Selection Board. The examination for admission to the Air Force Academy is held at Allahabad, Bombay, Calcutta, Delhi, Madras and Nagpur. Copies of the application form and full particulars may be had from the Secretary, Union Public Service Commission, Air Headquaters, New Delhi, the Pilot Officer III, Air Headquarters, New Delhi, the Air Force Recruiting Adjutants, High Grounds, Bangalore Cantonment, and I.A.F. Station, Tambaram. A candidate for these posts should be an Indian National and must have passed the Matriculation Examination or its recognized equivalent. The age limit is 17 to 21 years. Candidates should be single male. Those who are trained and commissioned as Pilot Officers may even rise to the rank of a Wing Commander and above.

As regards the other ranks, there is scope for enrolment for a period of nine years of regular service and six years in the reserve. Applicants should be between 17 and 22 years of age and must have passed the Matriculation examination or its equivalent. Those who have not passed the Matriculation will be entertained in Group 5. Applicants should be 5 feet in height with a minimum weight of 105 lb. The minimum chest measurements should be 30 inches with an expansion of 2 inches. There are several occupations such as Blacksmith, Carpenter, Coppersmith, Fitter, Electrician, Photo-Mechanic, Radio Mechanic, Armourer, Photographer, Turner and so on. In the non-technical trades, there are Telephone Operators, Drill Instructors, I.A.F. Police, Musicians, etc. Those who are trained as Air Craftsmen Second Class in Group I on a pay of Rs. 80 per month may rise to the rank of a Master Warrant Officer on Rs. 270 per mensem. There is equal scope for those who get enrolled in Group II and V, but the pay scales are slightly lower than those of Group I.

Life in the Forces is tough, but interesting. Those who want to serve in the Forces should be prepared to do any work from manual labour to the most skilled job. It requires determination and dexterity. As for the physical well-being, one should exercise his body so well as to stand the greatest stress and strain. Anyone who welcomes a life of this kind has a great scope for a good career in the Forces.

The advantage of getting enrolled in the Army, Navy and Air Force is to serve a full span of contract and then emerge with a reasonable pension, having received very good training in various trades. On release from the Armed Forces one can easily seek a civil job to supplement the pension that he gets from the Armed Forces. There are several benefits and concessions extended to the ex-servicemen in this regard. If young men who are suitable for service in the Armed Forces come forward to enrol themselves they will be richly benefitted by the training and discipline that the Forces impart and the Careers that they offer to those who want to live a hazardous life in the defence of our country.

Raja and Kumarapalayam Channels

Government have agreed to allow the pumpset holders of Salem district to draw water from the Raja and Kumarapalayam channels, even during the off-season as a special case in 1957. The policy of Government in regard to these channels is to fix two months every year during the off-season for total closure in consultation with the ayacutdars so that urgent repairs and improvements could be carried out to the channels.